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CITY PLANNING IN DANGER

THE existing unsatisfactory position of municipal reconstruction has been presented to the general public by a well-informed contributor to the *Observer* of June 15, in an article which emphasises the danger that all the well-studied schemes for the redevelopment of our war-damaged cities may be consigned to the scrap heap, with the consequent loss of the benefits of imaginative and skilful planning.

The examples given as typical of conditions at the present time are Plymouth, Bristol, Hull and Norwich, the plans and proposals for which have all been very fully dealt with in our columns by means of descriptive reviews of the schemes prepared by experts of high standing. Of course, it is only reasonable to presume that such schemes might demand minor modifications in detail in the interests of economy and of the suggested order of procedure, but the policy of the Government goes far beyond this and is discouraging to those who were anticipating a noble future for our major cities.

Our readers are in the position of being able to judge for themselves the merits of most of the plans devised with a view to the redevelopment of these important centres of activity and will, we are sure, feel it to be regrettable if these are abandoned or whittled down owing to the present attitude of the Ministry of Town and Country Planning, which can only be interpreted as due to pressure from the Treasury to reduce expenditure by this department to a minimum. This attitude has, moreover, encouraged the various local interests of a reactionary type to renew their attacks on the schemes and to revert to rebuilding on the existing plans with a very limited degree of improvement.

These interferences are not confined to mere matters of detail, but strike at the main principles on which the plans are based. For instance, in the case of Bristol, the scheme claimed an extension of the urban area by 776 acres in order to provide for "overspill" to relieve congested areas and for a logical distribution of open spaces with appropriate by-pass routes. Special powers for 243 acres only were granted. The same attitude is displayed towards Plymouth, where the expansion of the city area was obviously desirable in order to give a better distribution of the population which would be benefited by the more spacious and efficient redevelopment of the central portion. This extension has been so cut down by the Ministry that if the plan for the more open centre is retained the population of the city within the revised boundary would actually be reduced and outer suburbs would grow up beyond the districts under municipal control, an unreasonable and undesirable result. It appears as if the Ministry are taking this course in order to force the city to qualify its fine central plan.

These are only two examples among many others which characterise the action of the Ministry regarding municipal proposals based in most cases on well-conceived plans for reconstruction. With Mr. Silkin's avowed interest in good town planning it can only be imagined that he is allowing his department to succumb to outside pressure, which may also account for the long delays in dealing with the applications from local authorities for Declaratory Orders as the first step towards implementing their Town Planning schemes. Such delays are naturally very irritating, and in illustration of this it is stated that Norwich Council, after two years of futile negotiation, has withdrawn its application, a course equivalent to the abandonment of its improvement scheme. Thus traders, developers and builders have been held up to no purpose, and there is no idea at the moment as to how much, if any, of the plan will materialise.

This deplorable state of affairs is a sad sequel to the enthusiastic and vigorous movement for taking advantage of the extensive damage suffered by our cities by remodelling them in accordance with the highest standards we could imagine as being economically practicable. The value of what has been proposed is in large measure unquestionable, with its repercussions on every aspect of town life. It is natural that the programme of ways and means would present difficulties, but these were foreseen and the steps required to meet them indicated in general terms, involving a gradual progression, dealing with the various features of schemes in suitable gradation and the adoption of financial measures which would not put too heavy an immediate burden on the national resources. Even then it may be recognised that some qualifications of the proposals might be inevitable, but these should take the form of allowing more time for implementation rather than mutilating the plans and restricting their scope.

Local bodies are entitled to receive the help of the Government after they have done their work in preparing and submitting the plans they regard as an appropriate solution of their problems. They have done well in this respect, and these plans display, as a rule, such a striking advance on existing conditions, that more respect should be paid to them, and care taken not to destroy their validity by injudicious tinkering. The Ministry seems to fail to realise that its function should be to encourage rather than to throw cold water on local enthusiasm, but its delay in action and its hypercritical attitude towards plans have had the latter effect, so that, if continued, its procedure will result in a serious set-back in Town Planning throughout this country.

The movement took so brave an advance a few years ago and its future seemed to promise so much, that it would be a grievous disappointment if the Ministry in charge of this art should turn out to be its worst enemy by failure to appreciate the dominating influence that fine planning and building have not merely on the social and material needs of the people but also on their psychical and emotional character.

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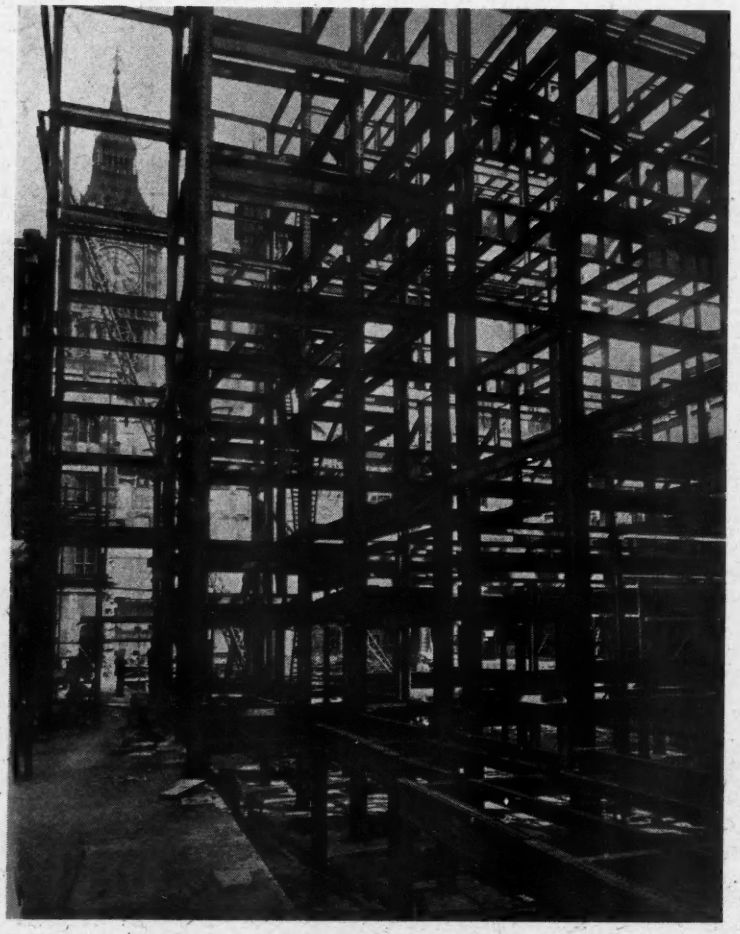
World Problem.

How does America compare with Britain in the matter of house and flat shortage? This question was recently put to an architect visiting London from New York, and these were some of his observations.

In New York (the home of the "apartment") building is restricted, but they are building. Down on East River, on sites that a few years ago housed the city's worst slums, many new blocks are being built, but the chief activity here is concerned with the building of the Stuyvesant Town Development, which includes a programme for 8,755 low-rental flats. Lucky "Stuyvesant" tenants will have such things as washing machines, incinerators, garages and kitchens which include all the latest American labour-saving devices. (If American kitchen experts continue to invent so many devices human beings will very soon become redundant about the place!)

In addition, children's private playgrounds will be provided, together with clubs, gardens and shops. Adjoining this site is the Peter Cooper project of 2,495 flats. This site is very close to the UNO site, and about 600 flats have been set aside for UNO personnel when the building is finished.

These two projects, however, appear to be the best of the case, for in the suburbs many thousands of partly finished houses are being left to deteriorate for the reason that building costs have rocketed to such an alarming extent that mortgage firms are unwilling to advance money. The builders have therefore become very chary about investing any more in houses that in all probability won't sell. Apparently we are not alone in having large figures quoted to us in connection with houses to be built, only for that figure to be reduced! Last year's figure for housing projects in New York was 2,000; this has now dropped to 600, and, according to our visitor, the situation is rapidly growing worse.



THE HOUSE OF COMMONS. View of steelwork for the new Chamber. (See Note.)

Rent Control in New York

One thing, however, definitely stands in favour of the New York housing administration, and that is the controlling of rentals. This control is New York State law, and does much to keep prices within reason. However, although the "premium" trick so prevalent in London has not caught on as such, many tricks are invented to obtain accommodation which, even by American standards, could hardly be called legal. One is to bet the landlord a thousand or so dollars that he hasn't got an apartment to let!

Sometimes it is an excellent thing to try to take nothing for granted and to attempt to think quite fundamentally about these very widespread problems. . . . Just whose fault is it that virtually the whole world over people are finding it difficult to obtain reasonable living accommodation? Many blame Hitler, lack of education in birth control, the lack of courage on the part of building financiers to take chances, and *even* the Government. But how about the architects? As an architect friend put it: "The solution rests with us, for although in the past architects have been labelled unsociological—strictly professional men with the insular ambitions of our class—if we are to save the world from chaos we must broaden our outlook and powers to reach the present-day horizon of human need. We must, in effect, gain more concerted power, power to advise and direct development of building, power as architect-sociologists to transmute the needs of the people into hard facts. Until we gain this power, we as a profession will merely be at the beck and call of any moneyed party. This is the story of the past, and the results are all around us to-day."

Roman London.

A war-time levelling of a great portion of the City of London has recently prompted the formation of the "Roman and Mediæval London Excavation Council," and work will soon be commencing on two or three sites adjoining London Wall, where it is hoped that excavations will result in definite evidence being obtained of the date of the original Roman defences of the City and of the strengthening bastions of the latter part of the occupation.

Archæology is not every architect's forte, but few of us will be unmoved at the possibility of extensive discovery in this field; and the programme now being drawn up by Mr. W. F. Grimes, Keeper of the London Museum and director of excavation to the Council, promises well. Preparatory work will include exploratory trenches on most of the blitzed sites in the London square mile; these trenches will be sunk to a depth of about 20 feet below average street level, but as many of the new City buildings will go down to much greater depth than this, work must be started quickly, unless Roman London is to be forcibly unearthed by ruthless bulldozers.

Many people will ask: "What do we get from it all?" adding that this is no time to rummage about below the earth's surface in an attempt to gain more knowledge of the Roman way of life. But any past culture is worthy of our study, and any pertaining to London especially so. There is at the moment an excavation in being near the site of the Saddlers' Hall, in an angle between Cheapside and Gutter-lane. The cutting is 50 feet long, 5 feet wide and 28 feet below street level. The bottom of the excavation corresponds to about A.D. 50, and the level four feet above to approximately A.D 180. In this

excavation indications have been found of native British huts with timber floors and roofs supported by timber posts driven into the ground. Sometimes the floors have been of clay, gravel or rough cement. Obviously such discoveries as this have great importance to us from many points of view, and in the next few months we hope the "Roman and Mediæval London Excavation Council" will succeed in unearthing for us further indications of how the ancients lived.

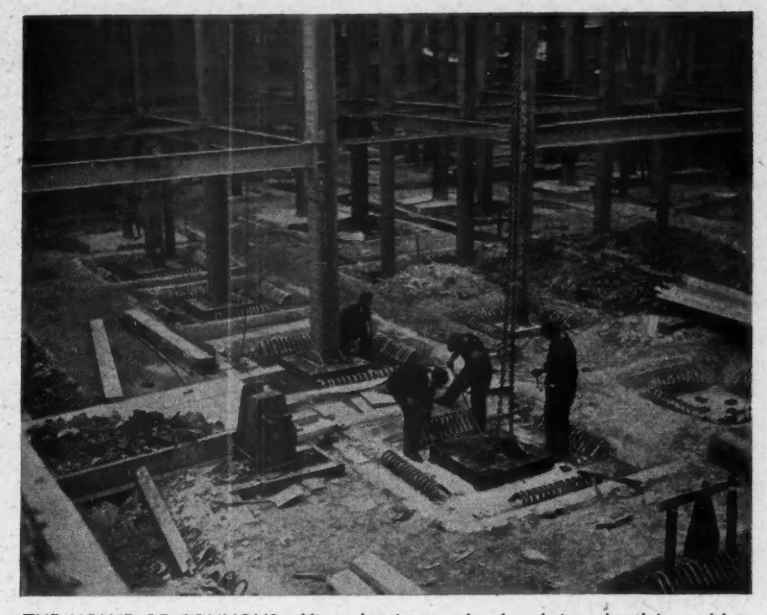
Still Standing!

One of the London landmarks that refused to be shifted by Nazi bombing is the famous George Inn in Southwark. This ancient tavern is so famous in history and so delightfully designed that no architect should miss an opportunity of paying it a visit. The first "George" was destroyed in the Southwark fire of 1676, a fire of some magnitude, for in addition to several inns, some six hundred houses were also burnt down; however, rebuilding was quickly started, and the George, as standing to-day, with its external gallery, can be said to have been built not later than 1677. In 1873, the freehold was purchased by the Great Northern Railway Co. from Guy's Hospital (which adjoins the site on the east), and their successors, the London and North-Eastern Railway Co., are, we believe, the present owners. At the time of this purchase there were still three wings with galleries; these remained until 1889, when two of them were demolished—but the building, as it stands now, can still give us a very fine idea of a 17th-century galleried inn. It is a great pleasure indeed to turn into this hostelry, near the foot of London Bridge, and to get just about as far away from the atomic era as one is allowed to in the very heart of London.

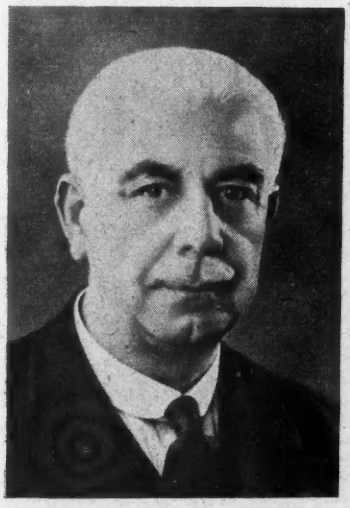
The New House of Commons.

THE STEELWORK which Messrs. Redpath Brown are erecting for the new House of Commons—as will be seen from the views given in these pages—is fast approaching completion. The general building position at the beginning of last week was given by Mr. Key in answer to a question by Wing Commander Hulbert, in the following terms: The steelwork of the new House of Commons Chamber is three-quarters completed. Work started in March, 1947, on the main building contract, and specialist sub-contracts have been let. Having regard to the difficulties in the supply of building materials and labour, it is too early to forecast with certainty the date when building work will be completed. The contract date is April, 1950, but in present circumstances it is doubtful whether it will be attained. After completion of the works contract, a period will be necessary for furnishing, and the testing of special equipment.

An article on the foundations was given in *The Builder* for January 10 and 17 last.



THE HOUSE OF COMMONS. View showing a sole plate being placed in position to carry a stanchion for the new Chamber.



MAJOR J. B. L. THOMPSON, the new President of the Institution of Municipal Engineers. (See Note.)

Leverhulme Scholarship in Architecture.

THE LEVERHULME SCHOLARSHIP, tenable at the Architectural Association School of Architecture, London, value £1,000, which includes payment of fees and maintenance for five years, has been awarded this year to Mr. Julian Keable, of Sittingbourne, Kent (and St. Christopher School, Letchworth).

Exhibition of Swiss Planning and Building.

THE EXHIBITION of Swiss Planning and Building, which was shown at the R.I.B.A. last autumn, is now in Copenhagen. Mr. Furrer, the architect of the exhibition, has written to tell the R.I.B.A. that it has been very enthusiastically received there.

Municipal Engineers' New President.

MAJOR J. B. L. THOMPSON, M.C., M.Inst.C.E., M.Inst.R.A., the new President of the Institution of Municipal Engineers, is Borough Surveyor, Engineer and Water Engineer of Swindon. He has served in this capacity for almost 23 years and through this lengthy period in office has carried out successfully the reorganisation or reconstruction of all the many services for which he is responsible. Practically a third of the buildings in the borough have been erected under his direction. Since the passing of the Town Planning Act of 1909 Major Thompson has been actively engaged in town planning in all its aspects and, in 1943, he presented to his council a proposed scheme for the redevelopment of the central portion of the borough which was approved unanimously and has received favourable comments from very many quarters.

To Address London Builders.

THE Minister of Works, Mr. C. W. Key, M.P., is to be the guest of honour of the London Master Builders' Association at a luncheon in the Connaught Rooms on Thursday, July 24, before the Association's half-yearly meeting.

Town Planning Institute: New President.

AT the first meeting of the newly-elected Council, held on June 20, Mr. J. R. Howard Roberts, C.B.E., was elected President of the Town Planning Institute for the year 1947-48.

A Correction.

WE are asked to state that the name given in our last issue in connection with the R.I.B.A. Building Surveyors' Examination as T. Idris should have been Idris Thomas.

Appointments.

MIDDLESEX C.C. PLANNING COMMITTEE has recommended the appointment as County Planning Officer of Mr. B. J. Collins, age 37, at a salary of £1,500, rising to £2,000, a year plus cost-of-living bonus. Mr. Collins is at present planning officer to the Mid-West Hertfordshire Joint Planning Committee.

STOKE NEWINGTON B.C. has appointed Mr. Harry Gale as Deputy Borough Engineer and Surveyor.

Professional Announcements.

MR. H. T. EUSHTON, L.R.I.B.A., A.I.A.A., chartered architect, has been appointed staff architect to Messrs. Bernard Thorpe and Partners, of 32, Millbank, Westminster, S.W.1, and would be pleased to receive trade catalogues including current information relating to farm buildings.

MESSRS. C. WILLIAM O'L. MARKHAM AND PARTNERS, quantity surveyors, have moved to 66, Victoria-street, London, S.W.1 (telephone: Victoria 8264/5). They announce that, as from July 10, Mr. J. D. Joyce will take over the organisation of the office at Bristol, the address of which remains as at present, 2, Queen-square, Bristol, 1 (telephone: Bristol 23604).

UNION MILL, CRANBROOK, KENT. (See Note.)

OBITUARY

William Matthews Hill.

We regret to record the sudden death at Leatherhead, on June 17, of Mr. William Matthews Hill, chairman of Messrs. Higgs and Hill, Ltd.

Mr. Hill was born at Clapham in 1873, and was the second son of Joseph Hill, who had recently merged his building business with that of William Higgs, at Vauxhall. He was educated in Clapham and in Germany and started work at the age of 19 in his father's joiners' shop. In 1906 he became a director of Higgs and Hill, Ltd., which had been incorporated in 1898. During the War of 1914-18 he put great energy into the company's war work, which included the erecting of hospitals.

Between the wars he personally supervised the erection of many well-known London buildings, including Peter Robinson's, Dickens and Jones's, Liberty's, Swan and Edgar's, the Park-lane Hotel, Chiltern Court, and a number of City business houses and banks. During the last war his energy was unabated and, besides his regular attendance at his London office and contracts, he travelled extensively to visit the company's activities in many parts of the country. He was happy to see the return of craftsmanship in post-war work and to supervise the restoration of the damaged portion of Buckingham Palace and the erection of the King George V Memorial. It was also a great pleasure to him last month to lay the foundation-stone of his company's new office building, which will replace the one he saw destroyed by the enemy in 1940.

Although a joiner at heart, he was keenly interested in the quarrying operations of the South Western Stone Co., Ltd., at Portland. He was a director of this and several other companies connected with building. He was a member of the Institution of Structural Engineers and a Fellow of the Institute of Builders. He served on the Council of the L.M.B.A. from 1935 to 1939.

He helped many charities, not only financially but in many other practical ways. One charity had his special care and affection—this was the Metropolitan Convalescent Institution, of which he was for many years a Governor.

Mr. Hill was well known and greatly respected in the many branches of the building industry, and his death will be deeply regretted by a wide circle of friends.

WIND- AND WATER-MILLS

Those interested—and what person of sensibility is not?—in our rapidly diminishing store of wind- and water-mills will wish to support that section of the Society for the Protection of Ancient Buildings which makes their preservation and continued use its special care. The Windmill Committee, first founded in 1929, now includes water-mills within its purview; it does not seek merely to preserve the fabrics as museum pieces, but would like to see them continuing their proper function as mills, and to this end is prepared to give technical advice on questions relating to the repair of wind- and water-mills, and to give financial help, wherever possible, as a means of encouraging the craft of country milling. From 1929 to date 303 cases have been handled, and 80 mills have been repaired under the direction of the Windmill Section. Yet it must regretfully be recorded that from 1929-1939 windmills went out of use at the rate of about twelve a year. To encourage millers, certificates have been awarded to those who have shown zeal in the maintenance of their windmills, and an illustration on this page is of Cranbrook Mill, Kent, whose owner, Mr. John Russell, received the first of the 18 presentations which have been made. The Society asks for the support of all who wish to see this attractive part of the English heritage preserved. Subscriptions (minimum 5s.) or donations should be sent to the Wind- and Water-mill Section, S.P.A.B., 55, Great Ormond-street, W.C.1.

An exhibition of wind- and water-mills, arranged by the S.P.A.B., was opened at Heal's Mansard Gallery, 196, Tottenham Court-road, on June 17, by Lord Esher. It remains open until July 26 (9 a.m. to 5.30 p.m. daily, Saturdays to 1 p.m.).

COMING EVENTS

Tuesday, July 1.

Housing Centre.—Mr. H. C. Harris on "Plumbing and Frost Protection," 13, Suffolk-st., S.W.1. 1,15 p.m.

Institute of Landscape Architects.—Mr. Christopher Tunnard, A.I.L.A., Professor of City Planning, Yale University, on "Town and Country Landscape, U.S.A." R.I.B.A., 66, Portland-pl., W.1. 5.30 p.m.

Thursday, July 3.

Eastern Federation of Building Trades Employers.—Half-yearly meeting. Speaker, Mr. E. J. Smith, President, N.F.B.T.E., Notts' Café, Letchworth. 11 a.m.

Wednesday and Thursday, July 9 and 10.

National Federation of Building Trades Employers. — Half-yearly general meeting. Cardiff. Further particulars, page 644.

R.I.B.A.

COUNCIL ELECTIONS

At a general meeting of the Royal Institute of British Architects held on Tuesday, June 24, at 66, Portland-place, the results of the annual elections to the Council were made public.

Sir Lancelot Keay, K.B.E., M.Arch. (Liverpool), of Liverpool, was re-elected President.

The other election results were :—

Past Presidents.

H. S. Goodhart-Rendel.

Sir Percy Thomas, O.B.E., D.L., J.P., Hon.LL.D.(Cardiff) (unopposed).

Members of Council.

Elected.

E. Maxwell Fry (1,698 votes).
C. G. Stillman (1,679).
L. C. Howitt (Manchester) (1,428).
Victor Bain (Leeds) (1,187).
John Swarbrick (1,174).
Michael Waterhouse, M.C., B.A.(Oxon) (1,140).
A. C. Bunch (Leamington Spa) (1,053).
Percy J. Bartlett (Nottingham) (843).

Not Elected.—C. H. Aslin (Hertford), Edward Armstrong, C. H. James, R.A., Gordon Stephenson (Richmond, Surrey), Thomas E. Scott, George Fairweather, F. R. Steele (Chichester), J. Price Nunn (Manchester), J. S. Beaumont (Manchester), C. G. Kemp (Tewin, Herts), C. E. Culpin, M. Hartland Thomas, A. E. Geens (Bournemouth), Basil C. Deacon (Bedford), Alfred H. Barnes (Croydon), T. J. Lynch (Sutton, Surrey), A. L. Abbott, and J. F. Howes.

Associate Members of Council.

Elected.

Professor W. G. Holford, M.A., M.T.P.I. (1,386 votes).
Professor J. S. Allen, B.Arch., M.T.P.I. (Newcastle-on-Tyne) (1,246).
Mr. Colin Penn (1,083).

Not Elected.—The Hon. Lionel G. B. Brett, M.A. (Watlington, Oxon.), Arthur G. Ling, J. L. Martin, M.A., Ph.D., H. T. Cadbury-Brown, R. H. Matthew, Maurice E. Taylor (Cupar, Fife), W. J. Wynn (Banstead), J. W. Poltock (Loose, near Maidstone), Winston Walker, W. W. Fisk, and C. L. Watson.

Licentiate Members of Council.

Elected.

Bernard H. Cox, F.S.I. (1,062 votes).

Not Elected.—Bernard Widdows (Derby), C. Bertram Parkes, M.B.E. (Birmingham), Robert Bostock, M.A., and Thomas Sibthorp (Woodford Green).

From *The Builder* of 1847.

Saturday, June 26, 1847.

All parties seem now to agree with us in the opinion that the accident to the Dee Bridge occurred, not through the failure of the masonry, or any accidental blow, but from the ribs being too weak to carry their own weight, the weight of the roadway, and the traffic. The nonsense that has been talked during the inquiry, either for the purpose of shifting the blame and throwing dust into the eyes of the public, or want of knowledge, must have been read with astonishment by those who are quietly looking on. . . . Railway engineers have become too speculative, too self-sufficient, and too careless; and railway directors are often too *exigent*. The endeavour to keep within the estimate, and to keep within the time, has produced much bad work, and want of care and overweening sufficiency have led to more.

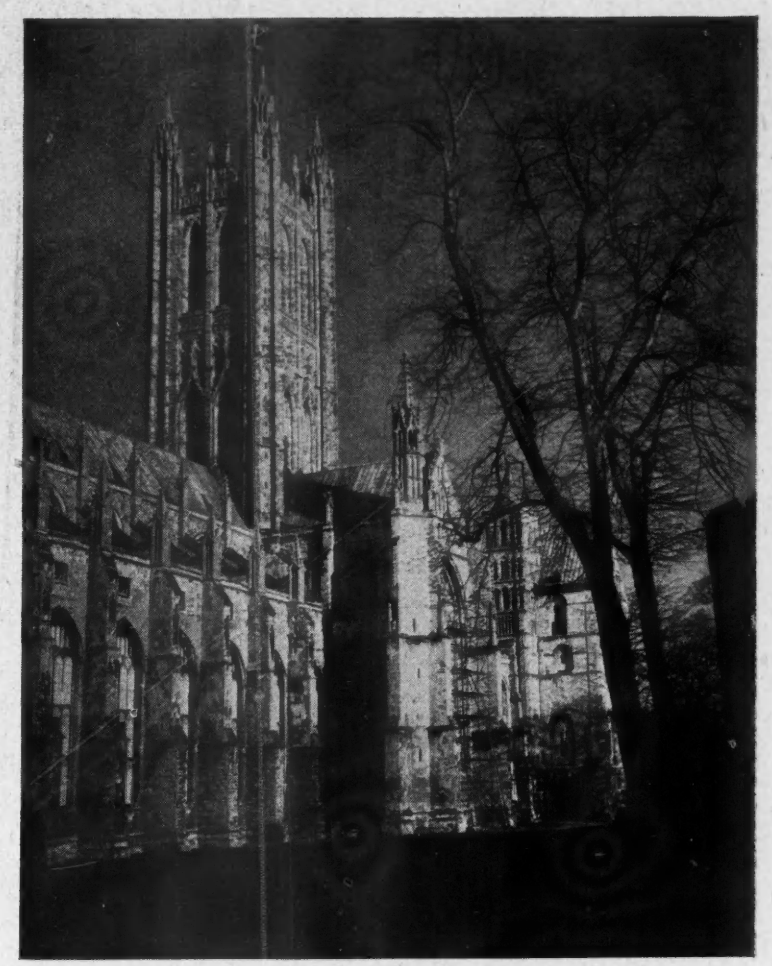
CANTERBURY CATHEDRAL

WORK OF REPAIR

THE 20th annual Report of the Friends of Canterbury Cathedral, now issued from Christ Church Gateway, Canterbury (price 2s.), states that work has been proceeding on the replacement of the ancient stained glass. This work has been under the care of Mr. Samuel Caldwell, whose family has looked after the Cathedral glass for three generations. The glass had been removed to a place of safety during the war, and a photograph on this page shows Mr. Caldwell, now 84 years of age, and his assistant, Mr. George Easton, at work on the replacement.

Writing in the Report, Mr. Gerald Knight, the cathedral organist, points out that the full organ, which was damaged by blast during the war, has never been heard by the present choristers and singing boys. After recalling that the last time the organ was used for a full service was on January 2, 1940, Mr. Knight says that a temporary console provided from the funds of the Friends enabled almost half of the organ to be used for the Easter services this year.

He reports that hundreds of new pipes and pieces of mechanism are now being made to replace those which were destroyed by bombs while they were under repair at a London factory, and that there is reason to believe that a new console will be completed by next Christmas. This will be placed on the Quire Screen instead of in the South Quire Aisle, where the temporary console is at present, and from the new position it will be possible for the player to hear the organ more easily. The problem of synchronising the singing of the choir with the accompaniment should also be much simpler.



CANTERBURY'S STAINED GLASS. The priceless 12th-century stained glass windows of Canterbury Cathedral, taken down in 4,000 pieces and stored for safety in the Crypt in 1939, are now in process of being restored. The work is in the hands of an 84-year-old craftsman, Mr. Samuel Caldwell, who comes from a long line of stained glass artists, and whose family have looked after the Cathedral windows for three generations. The work will take over twelve months to complete, and an appeal is being made for funds to help in the restoration of the Cathedral.

CANTERBURY'S STAINED GLASS. Mr. Samuel Caldwell (left) and his chief assistant (Mr. George Easton) are seen inspecting a glass panel before replacing it in position.

"When the organ is completed," he writes, "Canterbury Cathedral will have an instrument of which to be proud; it will possess practically all the pipe work designed and voiced by Father Willis in 1886, with suitable additions recommended by Sir Walter G. Alcock."

Other work undertaken by the Friends during the year has been the care of tombs and monuments under the direction of Professor E. W. Tristram, and vaulting of the Warriors' Chapel. The Friends have also undertaken to contribute £1,000 a year for the installation of a scheme of subdued and concealed lighting in the crypt.

Work on the pinnacles and parapets of the central tower has been completed, and all that remains is the placing in position of a final stone. A ceremony for this purpose took place last Sunday, June 22, during the festival week, when, after Evensong, the cathedral choir ascended to the top of the tower for a short service of thanksgiving.

The Malt and Hop Store.

THE GUINNESS BREWERY, PARK ROYAL

SIR GILES SCOTT, O.M., R.A., P-P.R.I.B.A., ARCHITECT

SIR ALEXANDER GIBB & PARTNERS, CONSULTING ENGINEERS

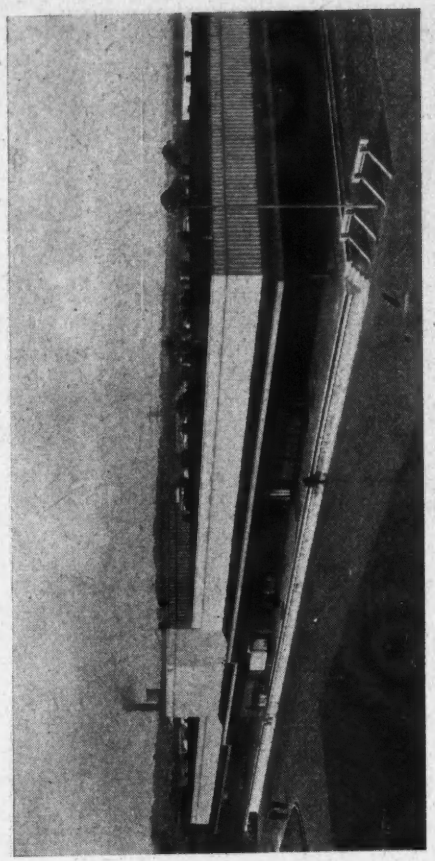
Vat House.

West Elevation, from North-West. On the left is the Administration Building.

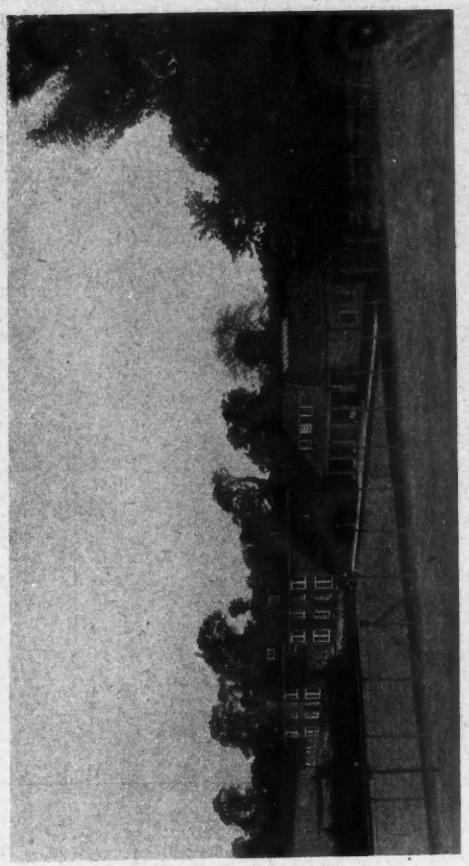
THE SITE OF THIS BREWERY AT PARK Royal, for Messrs. Arthur Guinness, Son and Co., Ltd., was chosen after a very careful consideration of the many factors involved in construction, operation and distribution. The brewery is linked up with the Great Western Railway and the Grand Union Canal. The total area of the land within the boundaries is approximately 80 acres, the main brewery buildings being sited on an area of approximately 35 acres in the eastern half of the site. The land to the west and north is occupied by staff houses and playing fields. The main buildings, consisting of five large monolithic blocks, are sited on a line running almost due north and south, the actual process of brewing starting at the south end in the malt store and finishing in the racking vathouse.

BUILDINGS.—The five main brewery buildings are supported on reinforced concrete piles 14 in. square and between 35 and 45 ft. in length. Owing to the nature of the ground, heavy piling was necessary, over 1,500 piles being used

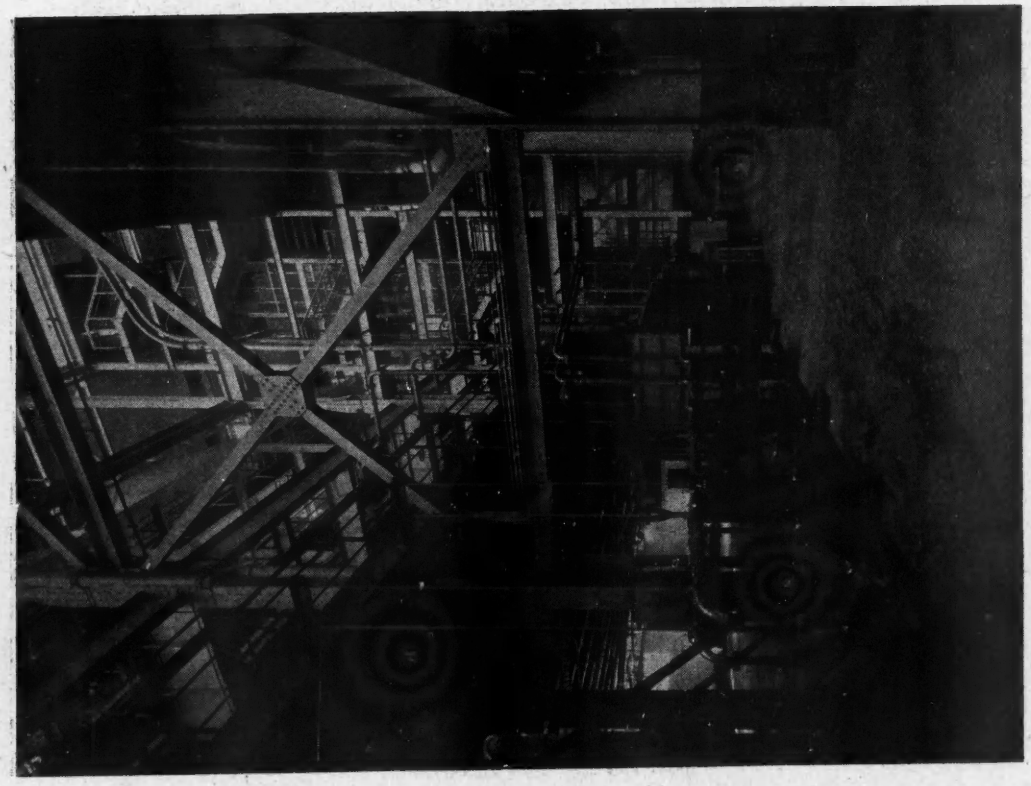
West Elevation, from South-West.



The Cask Cleaning and Washing Shed.



Bowling Green and Pavilion, with Staff Houses beyond.



The Brewhouse, from Basement.

Entrance Hall to Administration Offices (panelled in Sapele).

on the malt store alone. The piles were constructed on the site and driven after 10 days. All the plant and machinery is supported on braced steel framing. A secondary steel framing which is anchored to the main frame supports the brickwork forming the walls. In the case of the administrative building, the loads are all carried on concrete and steel grillages.

For convenience and accessibility all the buildings are inter-connected by bridges which also carry the conveyors for transport of brewing materials and the mains for pumping of beer, electric cables, water mains and other services.

ARCHITECTURE.—The whole of the construction work was carried out under the supervision of Sir Alexander Gibb and Partners, the consulting engineers. Sir Giles Gilbert Scott, O.M., R.A., P-P.R.I.B.A., was the architect, and his treatment of the elevations has given the main façades an appearance of quiet dignity. The average height of the malt store, brewhouse and storehouse is 100 ft., and this height has been emphasised by the architectural treatment, and although the ground falls at a fair gradient from south to north, the tops of these three buildings have been kept on the same plane.

The facing bricks are 2¾-in. Wellington facings coursing four to the foot, the joints being ⅝ in. flush. A deep reconstructed stone fluted band surrounds each block at approximately first-floor level. Brickwork below this band is in facings which are of a rather darker colour than the brickwork above. The brickwork has a particularly warm and sunny appearance which is partly due to the yellow ochre shade of the mortar and the wide joints. Doors and frames, both outside and inside, are either in teak or metal and with the exception of the north light roofing over the brewhouse which is of timber, the buildings are of fireproof construction throughout. The internal walls of the storehouse, central offices and cloakroom are all finished with glazed cavity faience blocks in a pleasing variety of colours.

MALT STORE.—The malt store building is interesting in that the 230 reinforced concrete storage silos, which are about 12 ft. in diameter and 65 ft. in depth, were constructed on the moving form principle in which the concrete is continuously poured. In this particular case, the silos were built in 14 days at an average rate of 5 ft. per day. On the south side of the malt store is located the machinery house containing the grain separating and cleaning machinery, while on the west front, large hop stores have been arranged.

BREWHOUSE. — The architectural treatment of the brewhouse is similar to that of the malt store. Owing to the high temperatures at which several of the processes take place, the roof was constructed of timbered north lights for ventilation. The offices in front are air-conditioned.

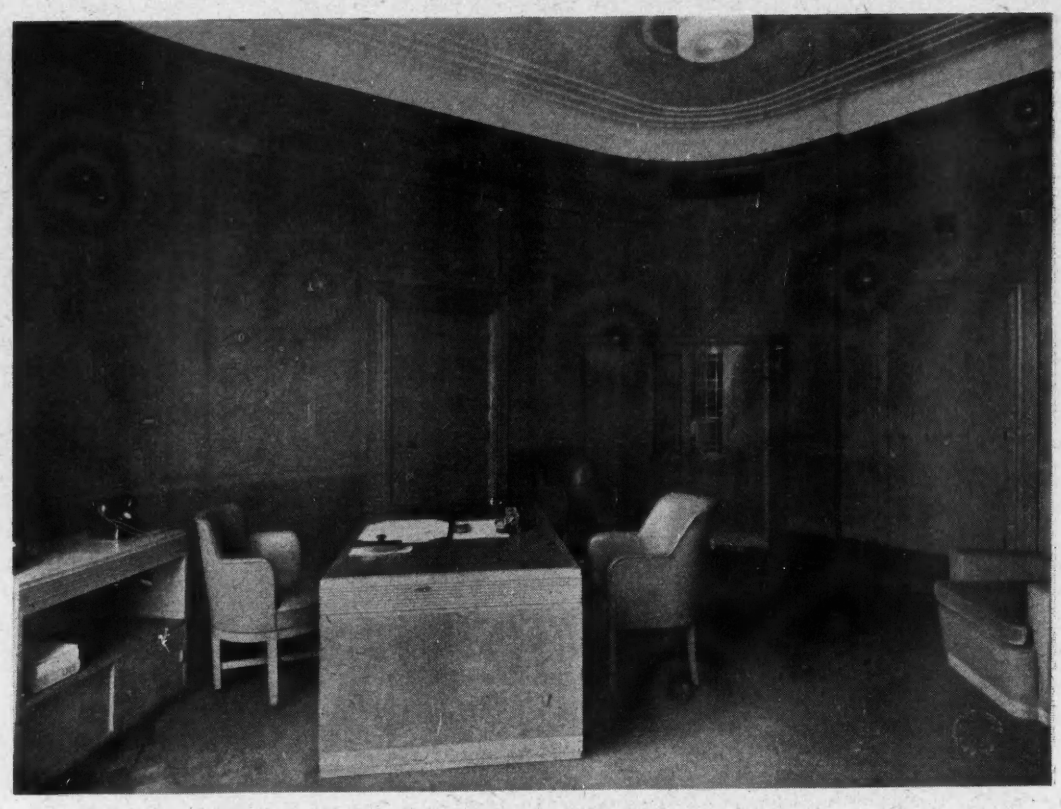
FERMENTING HOUSE.—As the bulk of the cooling of the wort takes place in this building the temperature is usually constant both summer and winter and special arrangements were necessary for the removal of the CO_2 produced during fermentation. This is collected by a system of ductwork and discharged by fans outside the building.

ADMINISTRATION BLOCK.—In the administration block are situated the dining-rooms, kitchens and recreation rooms. Air conditioning is also used here for the larger rooms.

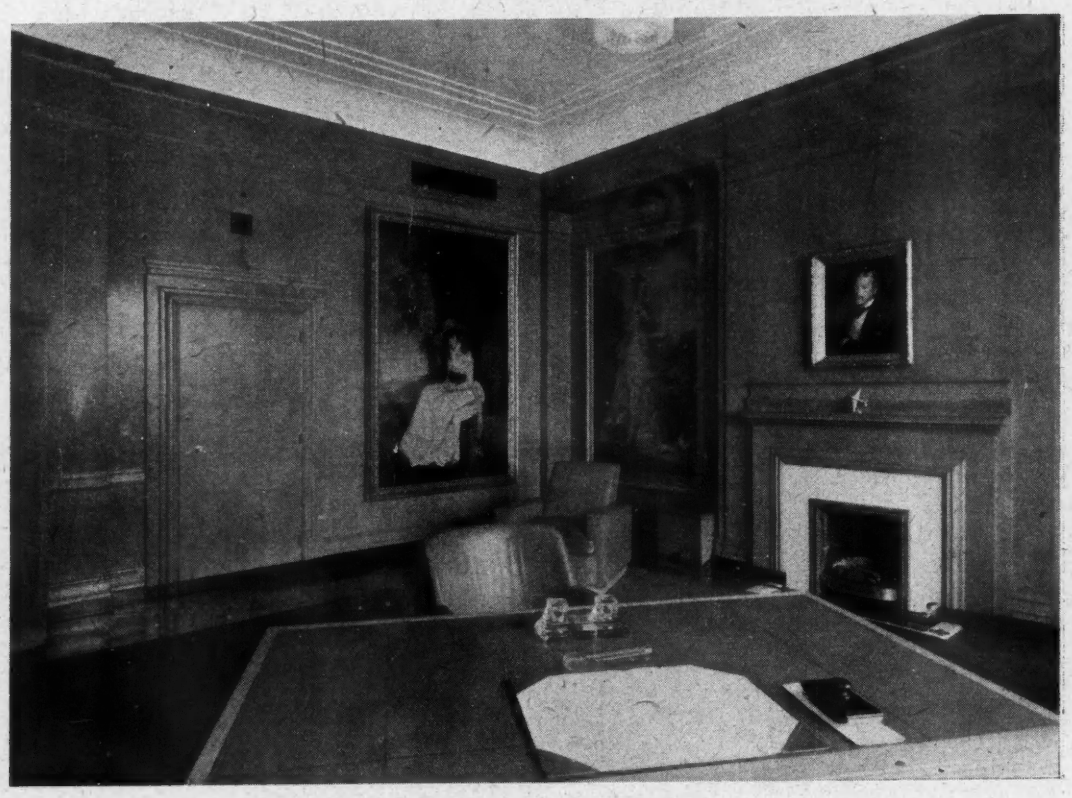
STORAGE VATHOUSE. — An unusual feature of this building is the absence of windows due to the need for maintaining a constant temperature inside the building, which is insulated throughout with Moler blocks.

RACKING VATHOUSE.—This building is similar to the storage vathouse, but the vats are situated at a higher level to give a gravity flow to the racking machines.

RACKING SHED.—The racking shed,

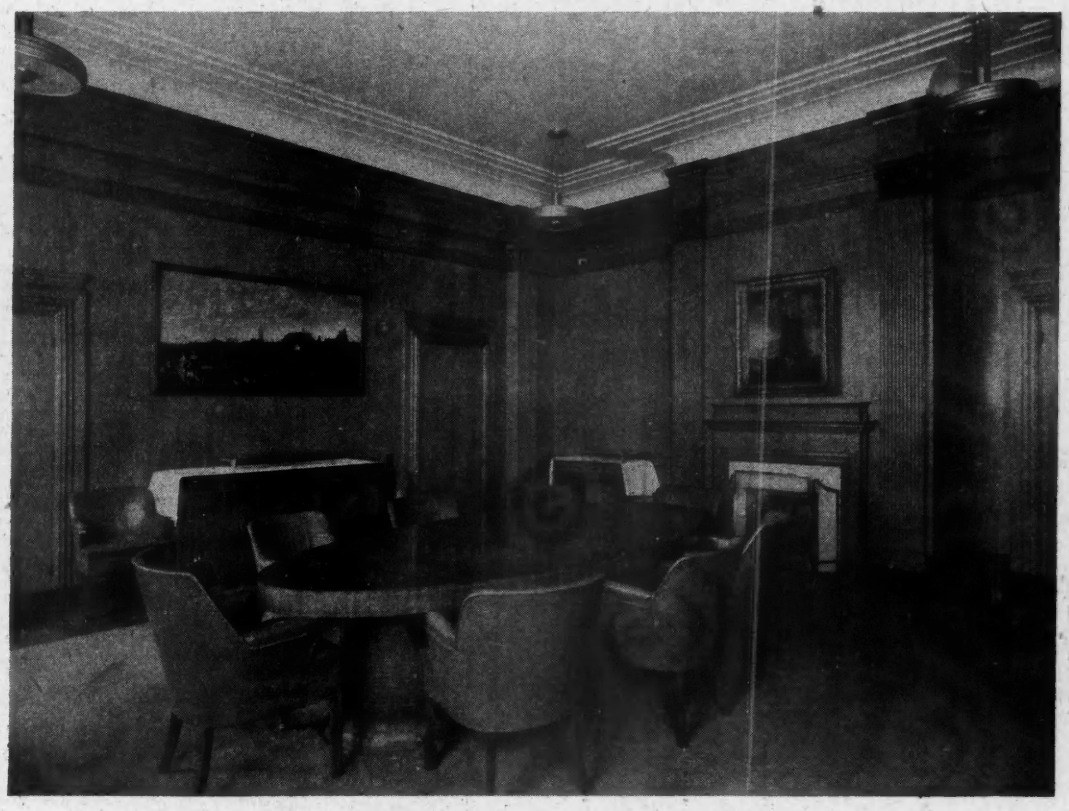


Above and Below : Views of Chairman's Room (panelled in Sussex oak).



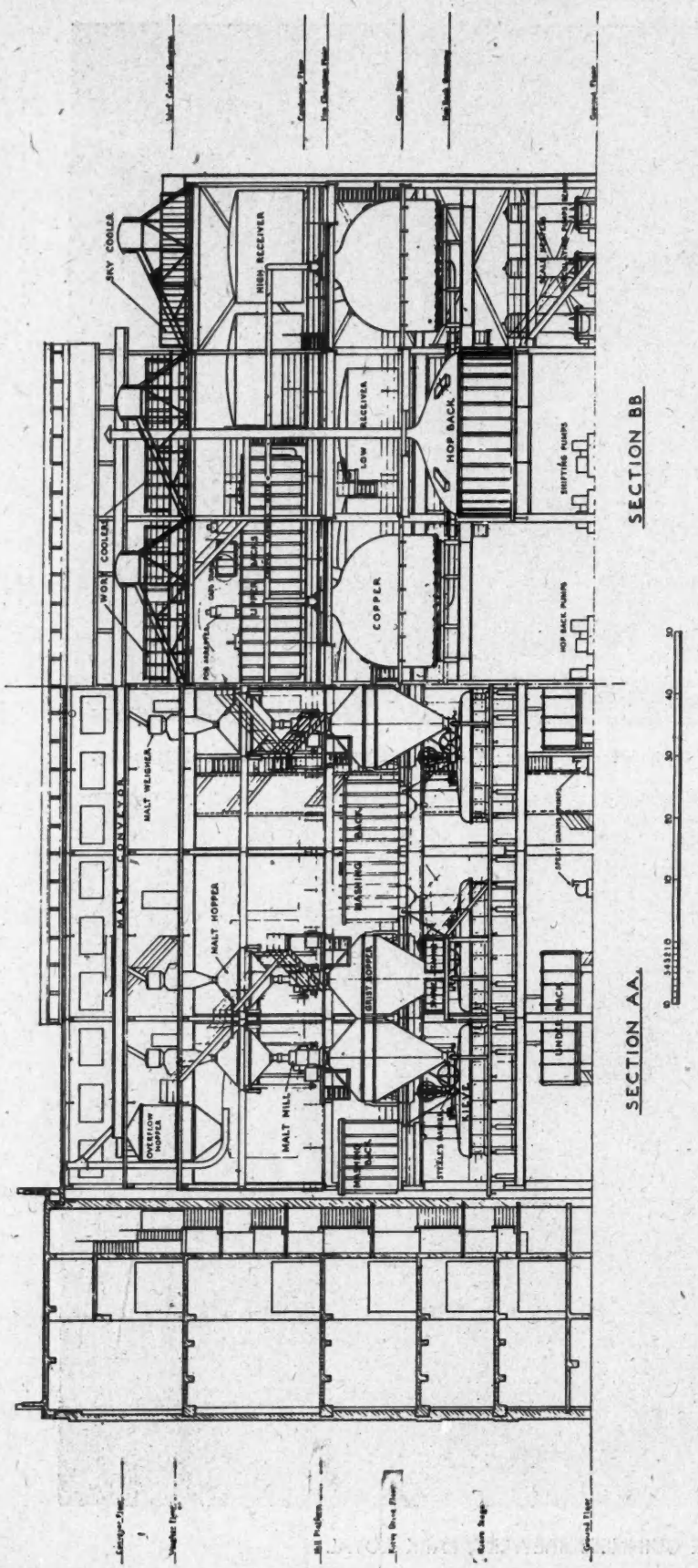
THE GUINNESS BREWERY, PARK ROYAL

Above : The Board Room (panelled in English walnut). *Below :* The Directors' Dining Room (panelled in Mansonia).



THE GUINNESS BREWERY, PARK ROYAL

E



Section through Brewhouse.

which is situated to the east of the vathouse, consists of a large covered asphalt floor sloping from south to north for movement of casks. These are off-loaded at the south end, cleaned and sterilised, and filled and loaded at the north end, thus obviating the necessity for conveyors. The roof is of the north light type with Robertson ventilators for the removal of vapour.

Power Station.—This is centrally sited for efficient distribution of power and heat to the other buildings and is served by a spur from the main sidings for the intake of coal.

Refrigerating Machinery. — The large refrigerating engine room is situated at the east end of the storehouse. The machines (which are of J. and E. Hall single-acting high-speed type) have a total refrigerating capacity of 7,000,000 B.T.U.s per hour.

General.—The auxiliary buildings include: By-products, cooperage shop, engineers' shop, brewery general stores, oil store and gate offices. These building follow the same design as the main blocks, but have been treated in a more simple manner. The concrete reservoirs at the Coronation-road end of the main buildings were constructed for holding the return water from the refrigerating machine condensers, and the condensing turbine in the power station. The various buildings contain many different types of plant and machinery which were supplied by a large number of main and sub-contractors.

Soil and storm water drainage are separate and follow the slope of the site to sewers in Twyford Abbey-road. Two large staff houses are situated at the north-west side of the site with a frontage of 280 ft. to Twyford Abbey-road. These houses are connected by a single-storey passageway. The design is of the Georgian type and is very pleasing. There are Wellington facings to the walls with Italian tiled roofs. A squash court and bowling green are fairly adjacent to the staff houses.

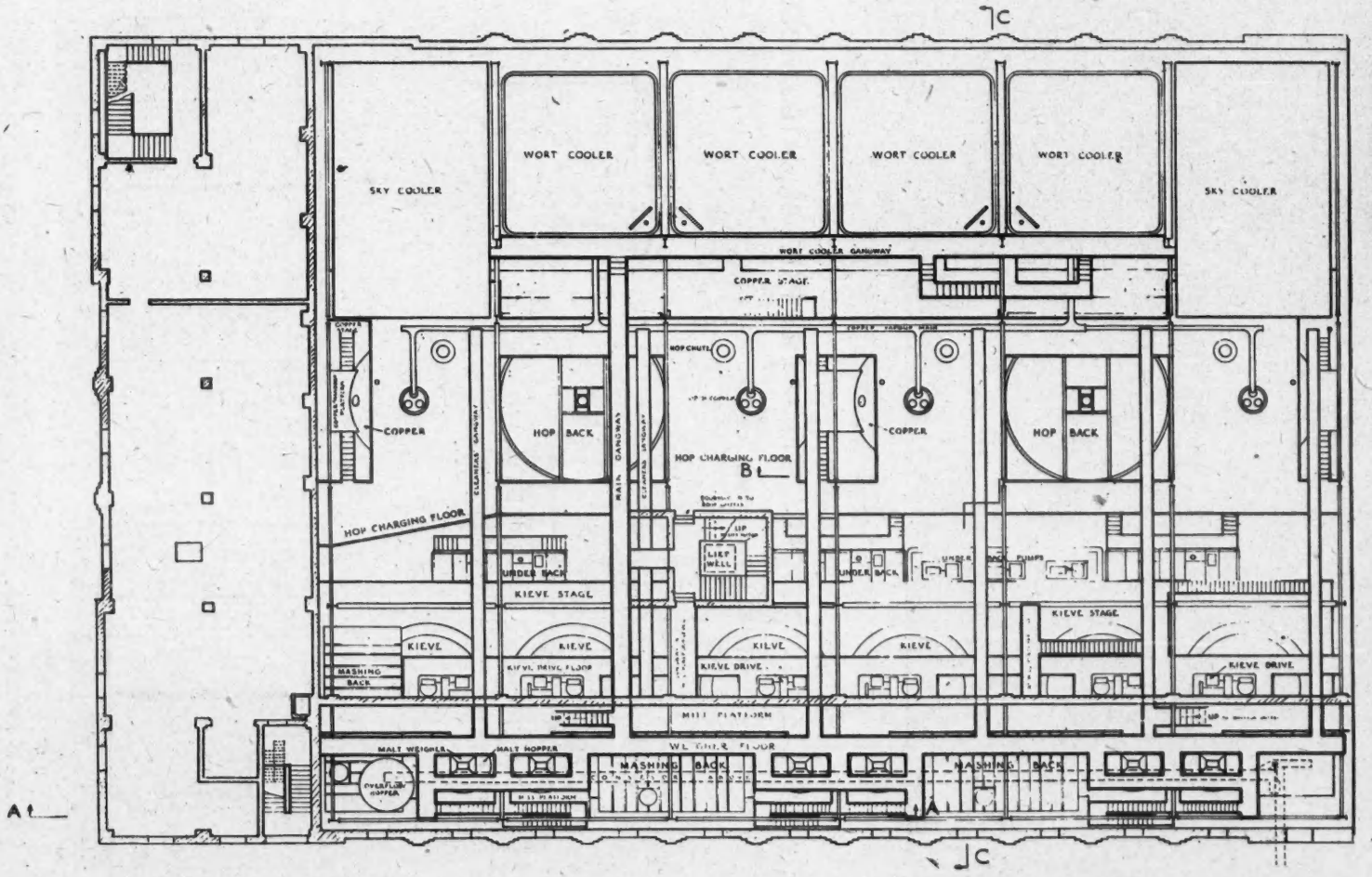
The whole of the west side of the site —*i.e.*, west of James's-way, which is the main brewery roadway—is taken up by a 10-acre cricket field and a miniature 9-hole golf course, while football fields are to the north, fronting on Twyford Abbey-road. Houses for brewery employees are situated in Moyne-place and Twyford Abbey-road.

The general contractors were Messrs. Holland & Hannen and Cubitts, Ltd., who built the whole job except for the garage, which was erected by Messrs. Allnatt (London), Ltd. The foundations were by Messrs. Peter Lind and Co., Ltd., and the steelwork was erected by Messrs. Redpath Brown and Co., Ltd., Dawnays, Ltd. (bridge pipework) and Sir Wm. Arrol and Co., Ltd.

It may be recalled that Sir Hugh Beaver, who was Director-General of the Ministry of Works during the war, was appointed Managing Director of Guinness's Brewery in November last year. He was consulting engineer for the new brewery at Park Royal when a partner in the firm of Sir Alexander Gibb and Partners.

Sub-contractors and suppliers were :—

Electric lifts, Waygood Otis, Ltd.; generator plant, W. H. Allen, Sons and Co., Ltd.; boiler-house plant, Babcock and Wilcox, Ltd.; reinforced concrete silos, Holland & Hannen and Cubitts, Ltd.; fencing, *ornamental*, Walter Macfarlane and Co., Ltd.; *estate fencing and chain link fencing*, Parker, Winder and Achurch, Ltd.; cables, Drake & Gorham, Ltd., and British Insulated Cables; locking system, Chubb and Son's Lock and Safe Co., Ltd.; panelling, Waring and Gillows, Ltd.; directors' offices furniture, Green and Vardy, Ltd.; steam and hot water pipe insulation, Newalls Insulation Co., Ltd.;

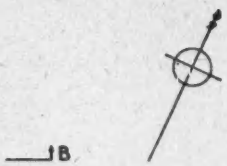


Plan of Brewhouse.

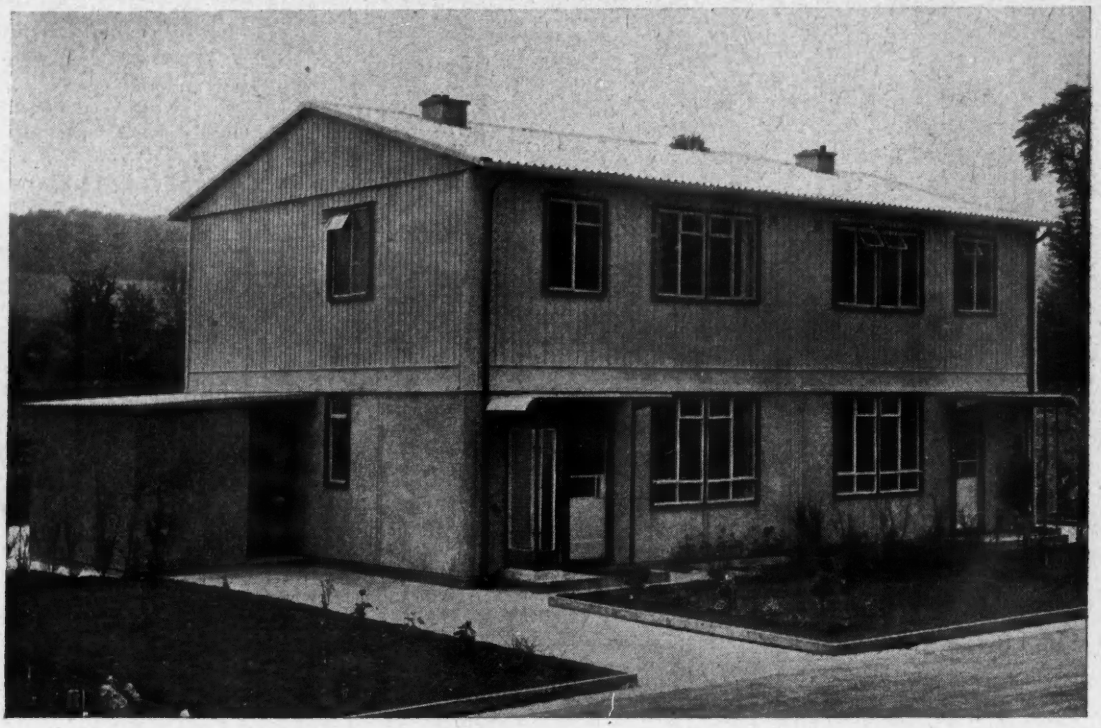
roads and sewers, Wimpey and Co., Ltd., Stewart and Partners, Ltd., and Waddington and Son.

Bricks (Wellington facing bricks), Blockleys, Ltd. (supplied through Ames and Finnis); asphalt, Limmer and Trinidad Lake Asphalt Co., Ltd.; glazing faiences, Shaws Glazed Brick Co., Ltd., and Hathernware, Ltd.; windows, Henry Hope and Sons, Ltd.; ventilation, Young, Austen and Young, Ltd., and Ashwell and Nesbitt, Ltd. (Leicester); cast stonework, Empire Stone Co., Ltd.; electrical fittings, Troughton and Young, Ltd.; floor tiles, Carter and Co., Ltd. (Poole).

Granolithic paving, Malcolm Macleod, Ltd.; Terrazzo



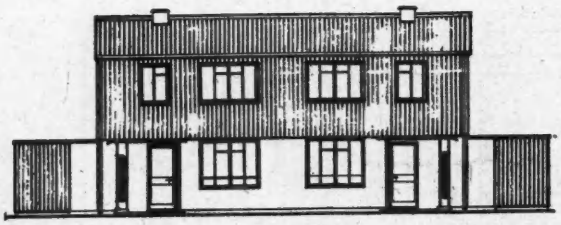
paving, Marble Mosaic Co., Ltd., and Art Pavements and Decorations, Ltd.; lantern lights and patent glazing; Mellowes and Co., Ltd.; wrought iron balustrading, Birmingham Guild, Ltd.; lightning conductor, J. W. Gray and Co., Ltd.; sanitary fittings, Shanks and Co., Ltd.; rolling shutters, Haskins Bros., Ltd.; cork carpets, Korkoid Decorative Floors; wood block floors, Hollis Bros., Ltd.; strip floor, Stevens and Adams, Ltd.; rubber floors, Dunlop Rubber Co., Ltd.; hydrant valves, Mather and Platt, Ltd.; fire alarms, Associated Fire Alarms, Ltd.; laboratory fittings, Townson and Mercer, Ltd.; electric water heaters, General Electric Company; and bi-folding doors, A. L Gibson, Ltd.



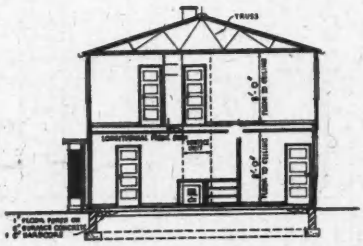
The Entrance Front.

THE "ALCRETE" TWO-STOREY PERMANENT PREFABRICATED HOUSE

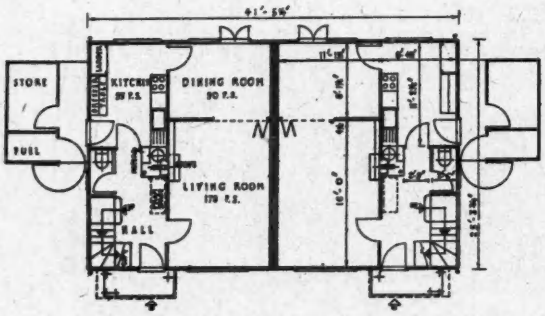
A. F. HARE & PARTNERS, A.R.I.B.A., ARCHITECTS



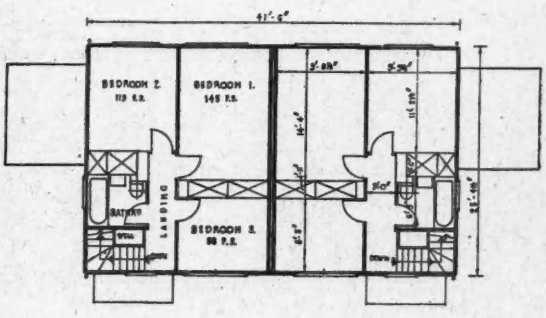
FRONT ELEVATION



CROSS SECTION

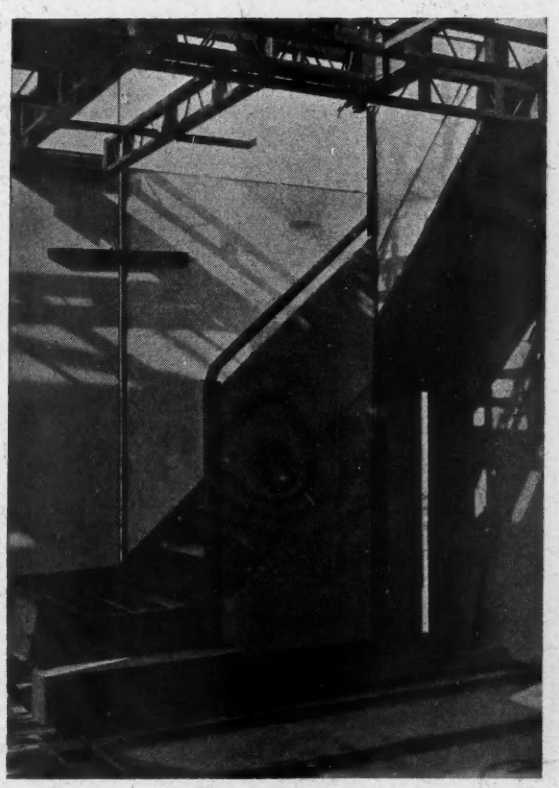


GROUND FLOOR PLAN



FIRST FLOOR PLAN

View of Living Room from Dining Room.



Staircase during erection.

View from Staircase into Hall.

THE "ALCRETE" TWO-STOREY PERMANENT PREFABRICATED HOUSE

THE "ALCRETE" TWO-STOREY HOUSE

THE MARK I "ALCRETE" HOUSE, designed by Structural and Mechanical Development Engineers, Ltd., and constructed by the Bristol Aeroplane Company (Housing), Ltd., has been sponsored by the Ministry of Supply. Designed to present the appearance of a normal, semi-detached residence built on site, its method of construction is based on developments pioneered in the aluminium bungalow, but incorporates many improvements. It has been designed to utilise the production facilities for the aluminium bungalow on the completion of the existing contract. The Bristol (Housing) factories are capable of producing 100 two-storey houses per week.

CONSTRUCTION: The house is designed to comply with the full requirements of the Ministry of Health, the Ministry of Works and the Burt Committee in respect of planning, construction, insulation, services and amenities. It is to a very large extent factory-fabricated and does not use materials which are critically scarce. Site erection is reduced to a minimum and can be carried out by unskilled labour under the supervision of a trained foreman. In order to conserve building labour, the guiding principle in the design has been the use of large factory-finished components such as walls, floors, partitions, services and roofs. The house is built round the service unit, which is a semi-load-bearing structure, and is the first item to be placed in position. The service unit houses all the plumbing, the water tanks, the slow combustion stove, the electric and gas meters and the waste pipe. The unit is finished in the factory as far as structure and internal fitments are concerned. The final covering is applied on the site in order to avoid damage in handling.

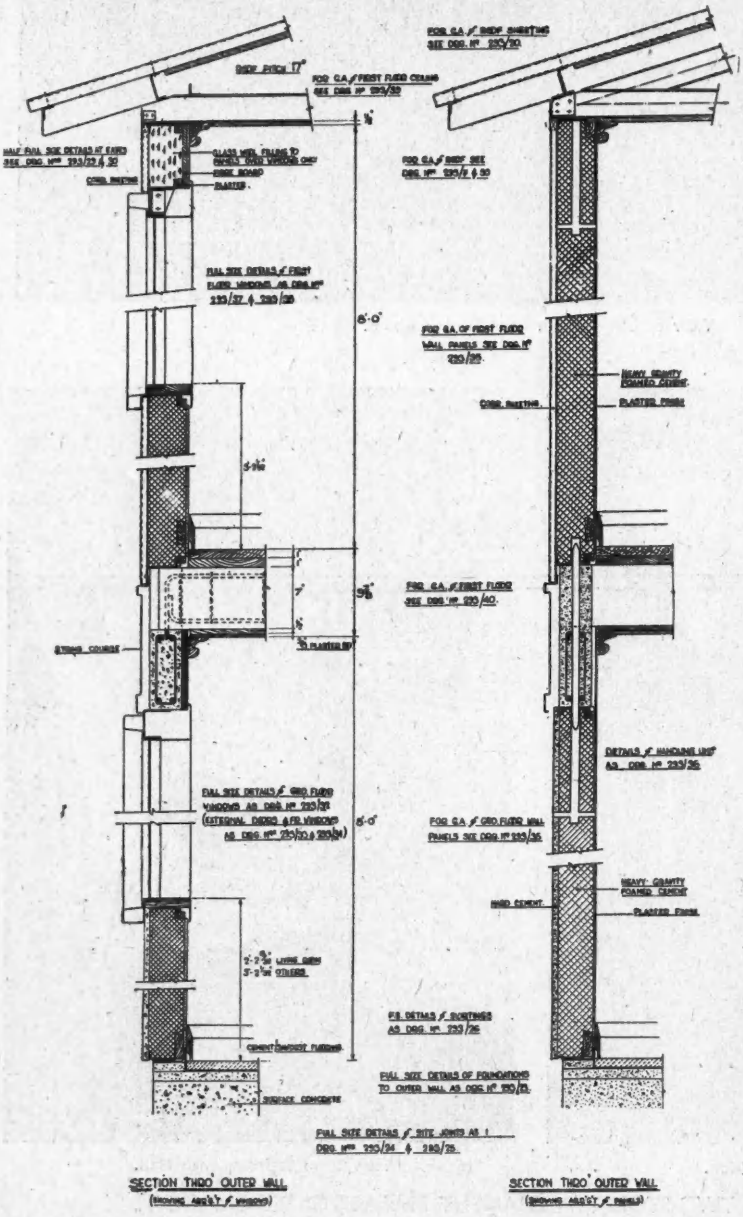
The wall panel is a composite unit consisting of the outer weatherproof skin, the insulation, and the inner finish, and is load-bearing. The outer skin of the panel is exposed aggregate, ¾ in. thick, and is bonded to the infill of cellular concrete by means of a bitumen bond and metallic anchors. The inner lining of factory-applied plaster is mechanically applied to the infill in the factory. A second bitumen-type bond between the plaster and cellular concrete prevents any vapour penetration of the walls. The wall unit is cast into a light metal frame, which gives it accuracy in construction and also protects the edges during transport. The outer light alloy frame also serves as an easy joining medium between the panels. Reinforcement is placed in the panels in order to obtain the necessary strength for handling. The internal partitions are generally of similar construction, except that they have two plaster skins and have no vapour barriers incorporated in them. Transport tests have shown that these panels travel well. The internal lining is waterproof to prevent damage by weather during construction.

After the ground-floor panels are erected, a lintel course is put round the house and is dowelled on to the first-floor panels. This lintel course has pockets cast in it, into which the floor beams are fitted. In the case of the first-floor panels the outer skin is of light alloy sheet which acts as the weatherproof skin. Otherwise, these panels are similar in construction to the ground-floor panels. The flooring of the first floor can be either in timber or in cellular concrete supporting sawdust-cement tiles. The sawdust-cement tile is a cheap form of flooring and gives a durable finish. It is a good substitute for timber.

The roof is prefabricated in five sections, each section consisting of the structural members, the outer roof skin and the ceiling members and ceiling board, and is put into position in complete units which bolt on to the first-floor panels. The various units of the two-storey house are easily handled by a one-ton crane with a 25-ft. jib. The house hull construction is entirely dry work.

After the hull of the house has been erected, the various internal fittings can be installed. The partitions on the first floor and ground floor incorporate the necessary cupboards. Where necessary, these cupboards have a soundproof backing in order to isolate the sound between the rooms. The party wall consists of two cellular concrete panels with staggered metal joints. The sound insulation between the two houses is in accordance with the requirements of the Burt Committee.

Insulation	B.T.U.s/sq. ft./hour/ of difference
Outer wall insulation ...	0.19
Roof insulation	0.2
Floor insulation	0.22



N.F.B.T.E. SUMMER MEETING

THE Lord Mayor of Cardiff, Alderman George J. Ferguson, J.P., is to give a civic reception to members of the National Federation of Building Trades Employers attending the half-yearly general meeting of the Federation, which, in recognition of the fact that the President, Mr. E. J. Smith, is a representative of the South Wales Federation, takes place this year in Cardiff.

The meeting will be held in the Lecture Theatre of the South Wales Institute of Engineers on Thursday, July 10, the civic reception taking place in the Assembly Rooms of the City Hall the previous evening.

At the end of the business sessions the President of the South Wales Federation, Mr. T. H. Huxley Turner, and Mrs. Turner will give a reception to members of the Federation. This is to be followed by a dinner and dance.

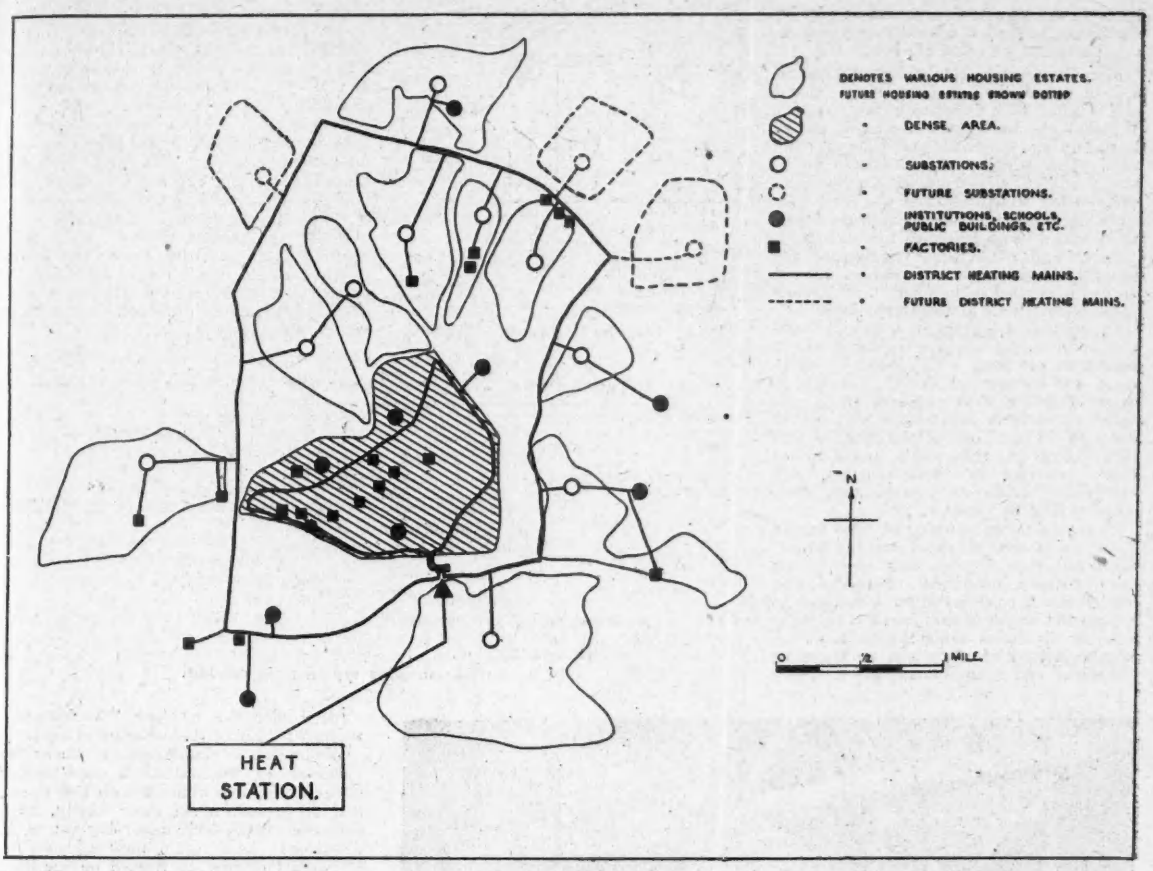


Diagram showing typical development of District Heating installation for industrial town with new housing estates on outskirts.

DISTRICT HEATING

MR. J. R. KELL'S PAPER TO THE A.S.B.

An Architectural Science Board Lecture on "District Heating" was given by Mr. J. R. Kell, A.M.I.Mech.E., M.I.H.V.E., M.Inst.F., before a meeting of the Royal Institute of British Architects on Wednesday, June 4.

After making some brief historical references and discussing the development of district heating abroad, the speaker continued :—

In comparing the possibilities of district heating in this country with experience derived from abroad, it is commonly supposed that the difference of climate here renders the case for district heating less advantageous, as the amount of heat supplied for a given area is less than in colder countries. It is true that the number of degree days in this country, say in the London region, is of the order of 3,500 to 4,000, whilst on the Continent, Russia and America, the degree days may be 5,000 or 6,000 per annum, or even more. This, however, is not so serious as might be thought at first sight, since although the maximum demand for heat for a given area may be less here than elsewhere, the relative annual consumption or load factor is in many cases equal to, if not better than, abroad. In other words, less heat is required longer. This has been found to be particularly the case with housing, especially if the type of heating takes the form of background heating, where a fairly constant load is given for seven months of the year.

The Technique To-day.

(a) The design falls into two parts :—

1. The heat-producing section;
2. The heat distribution.

The production of heat may be either direct in boiler in a straight-heat station, or it may be as a by-product or exhaust-steam from electrical generating plant. We will refer to the latter more fully later, but in either case the design presents no unusual problems

In the matter of the distribution of heat, here again, normal engineering methods are followed. But with district heating there are some problems which the designer has to face, on which experience of actual working installations in this country would be valuable. There is, for instance, the question of the diversity factor which can be allowed as between the maximum demand and the total connected load for a given number of buildings. There is also the question of economic water velocities in the sizing of mains, and the optimum thickness of insulation. These and other matters would be greatly assisted by direct knowledge of results obtained in practice.

(b) It is necessary to decide on the heating medium to be used—whether steam or hot water, and if the latter, whether at ordinary radiator temperature (about 130 degs. F. flow) or whether at high pressure (say at 300 degs. or 320 degs. F.). Also, if water is used, the question arises as to whether the distribution is by two-pipe, three-pipe, or four-pipe system. In the case of the two-pipe system, everything is served from the one pair of mains. In the three-pipe system, the heating is served from one flow main, the hot water supply through indirect calorifiers by the other flow main with a common return. In the four-pipe method, heating is served from one pair of mains, and hot water supply is served direct without calorifiers from the other pair of mains.

There would not be time in the present paper to go into the merits and application of each kind of medium and of each kind of piping system. It must suffice to say that the trend in this country with such new schemes as are in progress or in contemplation is mainly on the basis of hot water as the heat carrier, with generally a three or four-pipe system for small housing estates, and a two-pipe system for more extensive schemes.

Laying Mains.

(c) The method of laying the mains in the streets and up to the houses and buildings is next to be decided upon. One would imagine that every conceivable type of duct and conduit had by now been designed and used, as is indeed probably the case in America. Many of their standard pre-formed conduits are not, however, as yet available in this country, and a designer of a district heating scheme here has to make his own approach to the prob-

lem. In so doing there is no reason why he should not produce a more economical solution particularly suiting our conditions.

The mains of a district heating system are, of course, hot, and therefore expand and contract with variation of temperature. Whereas gas and cold water pipes can be buried in the earth without other protection, pipes which are hot cannot be so buried without risk of serious heat losses in evaporating moistures from the earth surrounding them, and also in such a method there would be an unknown risk due to expansion and of external rusting of the pipes. Methods appear to have been devised abroad for encasing the pipes in an insulating material with a waterproof layer outside, jointed in lengths in a special form, and so avoiding ducts altogether. It is this kind of thing which needs development and experiment in this country, if district heating is to go ahead on a large scale, since it is found that the cost of concrete ducts is one of the most expensive items in the whole make-up of capital charges in these schemes, and everything should be done to keep these costs as low as possible.

In regard to the running of pipes to and from the houses, say on a housing estate, again the cost of protecting the pipes is found to be a heavy item of expenditure. Thus there is some scope for a designer to reduce the length of the pipes by, perhaps, running his mains along the backs of the houses instead of along the footpaths at the front and then up the garden path.

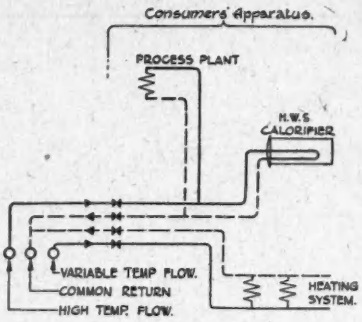


Fig. 2.—Diagram of three-pipe system.

With mains at the back, generally the run-out connections can be quite short.

Where the pipes are small, one feels that it should be possible to develop some form of pipe - cum - insulation - cum - waterproof protection, in a flexible form somewhat similar to an electric cable, which could then be run out off a drum and buried solid in the earth. This would greatly simplify the house connection problem. Possibly the use of long continuous lengths of copper piping might be a solution.

Whilst the general runs of mains will normally have to be under the streets or pavements, it is of course possible to arrange for trunk mains sometimes to run overhead, or above ground, along railway tracks, sides of canals, etc.

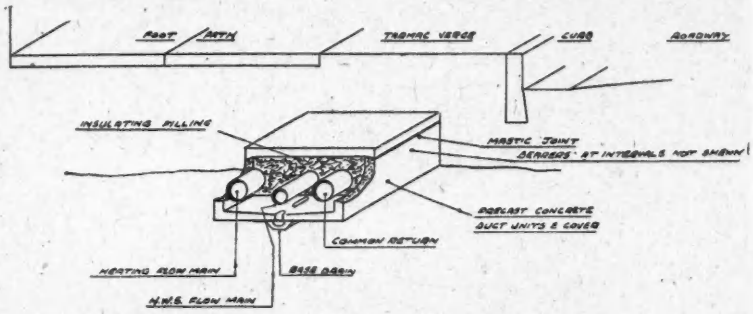


Fig. 3.—Section showing typical main conduit.

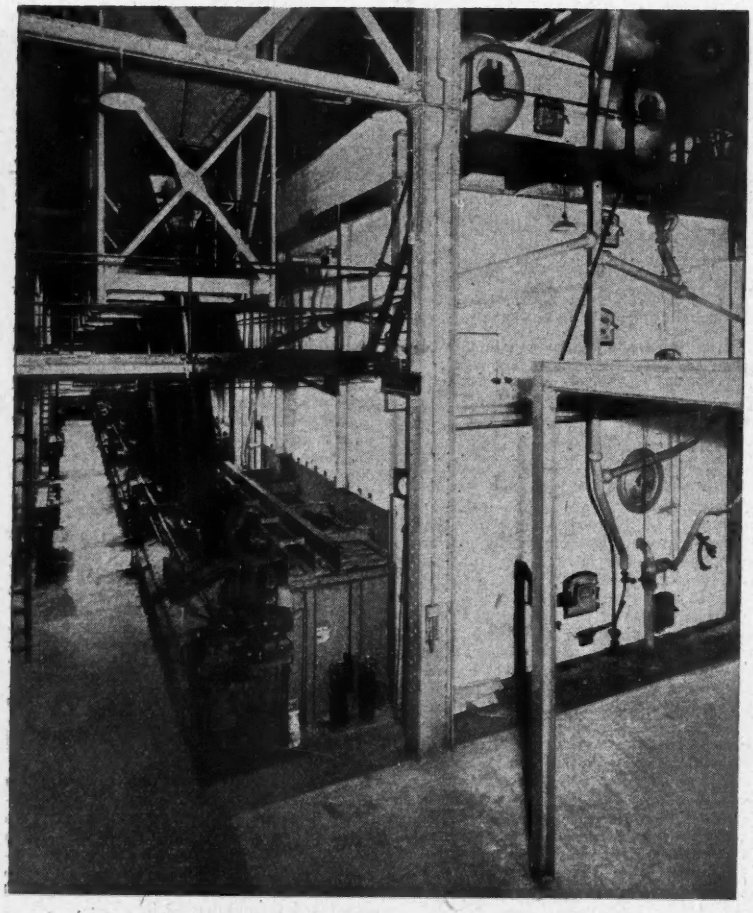


Fig. 1.—Water-tube boiler plant, heating large war-time depot comparable to a district heating plant.

(d) Under the heading "Technique" we might refer to the metering of heat.

Whilst this is simple with steam as the medium, by the use of a condensation meter, it is more difficult with hot water, and at present much more costly, as a cheap hot-water heat meter has yet to be produced. As a result, most schemes for residential estates are framed on the lines of giving continuous heat with some general form of control according to weather, or some limiting restrictive device controlling the amount of heat which can be taken by any individual user. At the same time, public buildings and other large consumers would require to have heat meters.

The Thermal Electric System.

(e) Before proceeding further, it is necessary to enlarge a little on the combination of district heating with electricity generation, commonly called the thermal electric system.

It will be appreciated that any heat engine, of which the steam turbine is but one example, takes in heat at one temperature, converts a portion of the heat into work, and rejects the balance at some lower temperature. The farther apart the upper and lower temperatures, the greater the amount of heat which can be converted into work. Hence the attempt to raise the initial temperatures and pressures to as high as prevailing design permits and at the same time, at the bottom end, to increase the vacuum, so that lower and lower condensing water temperatures may be used. At present steam temperatures have been used up to about 950 deg. F., and vacuums giving condenser water temperatures of as low as about 75 deg. to 80 deg. F.

Even so, the proportion of heat extracted from steam converted into work, after allowing for boiler and other losses, achieves a figure no higher than about 28 to 30 per cent., even in the largest and most efficient super power stations. Taking all the stations in the country, the figure is nearer 20 per cent.

If now the low-grade heat at the bottom end of the temperature scale, as in the steam exhausted from the turbines, is used for district heating, the overall efficiency can be raised to about 75 per cent. In the normal straight electrical generating station the temperature at which such heat is rejected is of the order of 75 deg. to 80 deg. F. This is, however, of no use for distribution for the heating of buildings, and it is necessary, therefore, to limit the amount of expansion permitted in the turbine, and to reject the heat at some higher temperature, such as, say, 200 deg. or 250 deg. F. When this is done the amount of work extracted by the machine is obviously reduced, and to maintain the same output bigger machines are necessary, and at the same time bigger boilers. The overall working efficiency is almost independent of the ratio of power to heat extracted, if both are usefully employed.

Thus in a combined station the first important consideration to be settled is at what temperature shall the heat be rejected from the turbine plant and accepted by the district heating system. The higher the temperature the less the amount of electric current generated, and the greater the amount of waste heat available for sale. Also, the higher the temperature the smaller the sizes of the mains. Complicated considerations are involved here, but it might be mentioned that in Russia the standard appears to be a rejection temperature such that the water flowing to the district heating system can be kept at 240 deg. F. with a return of 160 deg. F. In addition, in the Russian examples, for cold-weather operation, peak heating is included served direct from the boiler plant through heat exchangers, to give a maximum flow temperature of 275 deg. F. When it is remembered that the extremely cold weather is only a portion of the whole heating season, this is an economical arrangement, since it limits the sacrifice of power to some extent by keeping the exhaust steam temperature lower than would otherwise be the case.

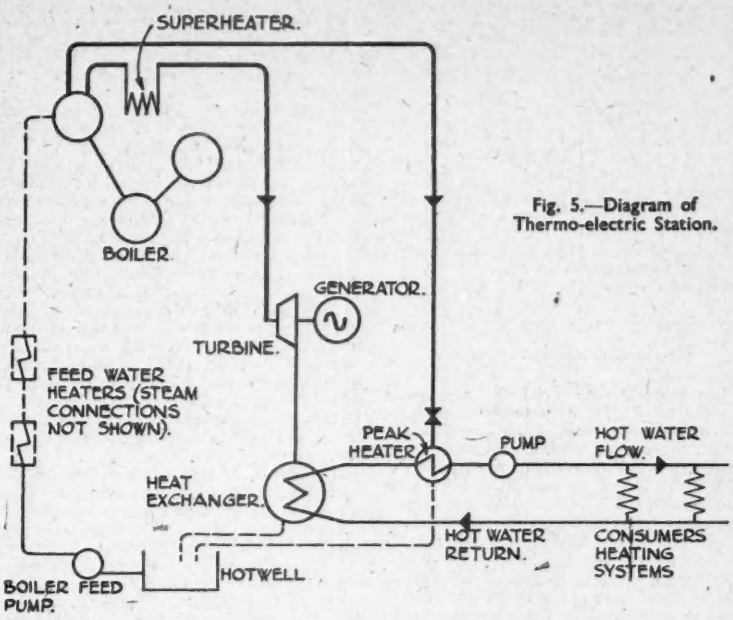


Fig. 5.—Diagram of Thermo-electric Station.

We mentioned above raising the efficiency to about 75 per cent. with a combined station. This may occur theoretically, but in practice the heat and power loads will not necessarily coincide, and, furthermore, during the summer months there will be long periods when there is insufficient heat load to absorb the waste heat from the plant. Thus, in order to keep a station at work, giving a reasonable output, at certain times the plant would have to run under condensing operation,

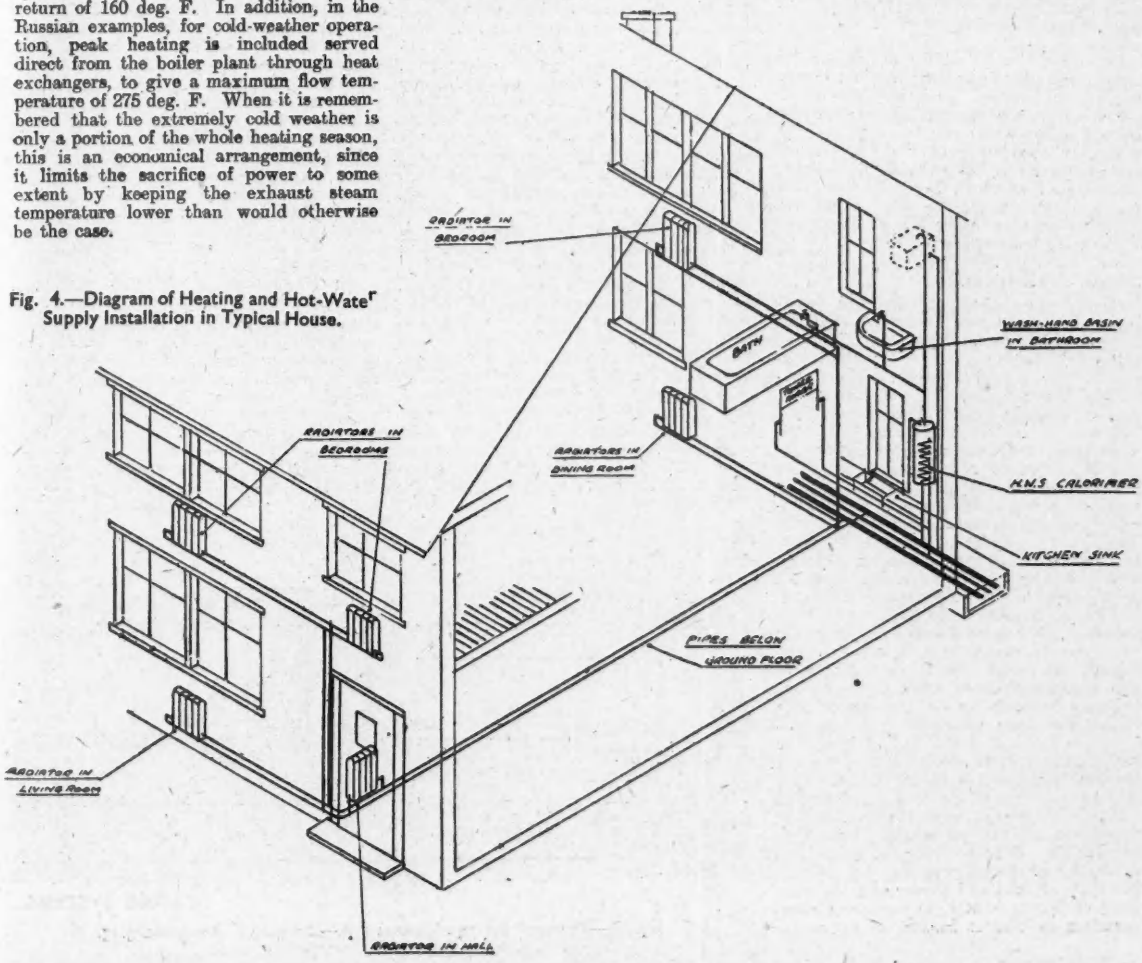


Fig. 4.—Diagram of Heating and Hot-Water Supply Installation in Typical House.

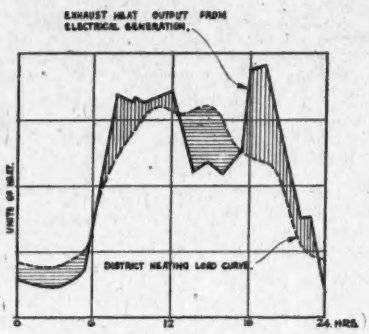


Fig. 6.—Winter Load Curves.

but in so doing the overall efficiency would be dropped. In a particular example which has been taken out in considerable detail, the overall working efficiency for a year was found to come out at 69 per cent. This is, of course, a vast improvement on the 20 to 30 per cent. figure for the normal electricity station mentioned previously.

The presence of the electric grid in this country should be an advantage to thermal electric generation, since it means that each station can find a sink for the surplus electric current which it may be generating, due to a heavy heating load at a time when the local electricity demand is low. This facility has not been available to the same extent abroad. For this reason the provision of heat accumulators to absorb surplus heat at times when there is a large electrical demand may be of less importance here than it has been abroad.

In view of the desirability of keeping the temperature of the heating medium down, hot water becomes preferable to steam for use with the thermal electric station, since the hot water can be circulated by pump, independently of the temperature of the steam supplying the heat. Indeed, distances of as much as five miles from the station can be covered. There are other advantages in the use of hot water which need not be referred to here.

Official Publications.

Some years ago, the Heating and Ventilating Reconstruction Committee was set up by the Department of Scientific and Industrial Research, under the chairmanship of Sir Alfred Egerton. This Committee has reported on the heating of dwellings in the Post-War Building Series No. 19. It will be seen from this document that the question of district heating was relegated to a sub-committee. The sub-committee found that more careful investigation was necessary than they themselves could give, and they in turn set up a Working Group, for the purpose of working out particular examples in extenso. The Working Group, of which I was a member, with Mr. A. Stubbs as chairman and H. E. Beckett as secretary, continued its labours for some years, and eventually produced its report back to the sub-committee. It found that there was a great deal more work involved in following one example through to its conclusion than had at first been apparent.

In the meantime, the end of hostilities had occurred, and the domestic housing problem appeared to be in the forefront. As this particular side of district heating had not been dealt with by the Working Group, at any rate as applied to the kind of housing estates being envisaged, a separate committee was set up by the Ministry of Fuel and Power and the Ministry of Works jointly, to prepare a memorandum on district heating as applied to small housing estates. One or two of the members of the Working Group who were in the ministries, served on the Memorandum Committee, and their report was produced in August, 1946.

In the meantime the sub-committee on district heating felt that it was necessary to issue an interim report, pending the completion of the final report on district heating, in view of the increasing interest in the subject, and they therefore compiled the "Interim Memorandum on District Heating," issued in September, 1946.

The full report of the Working Group is completed, and copies have been made accessible to public bodies interested. At the Ministry of Fuel conference last autumn, when a whole session was devoted to district heating, Mr. Stubbs gave a review of some of the chief items contained in this report and we will refer to it a little more fully in a moment.

These three documents at present cover the official publications on the subject to date.

In April of last year, the Government established an inter-departmental sub-committee on district heating comprising representatives from the Ministries of Health, Fuel, Works, Town and Country Planning, and of the D.S.I.R. This committee is technical, and its purpose is to report to the Ministry of Health, as the loan sanctioning body of schemes submitted to that Ministry by local authorities.

This completes the picture of the progress to date, as we understand it, but to return to the official publications :—

(a) *The Memorandum on District Heating Applied to Small Housing Estates.* This is a model of brevity, and of how reports should be presented. Those who have read the memorandum will appreciate the amount of work there is in it, brought down to a small compass easily read and digested. Briefly, the scheme was to examine the cost of district heating applied to four schemes of 122, 241 and 496 dwellings, the latter being taken out with two different types of distribution. The schemes were all priced at 1937 prices, but schemes 2 and 4 were also taken out at 1946 prices. In all cases the heating is by straight-heat station burning coal, with no electric generating link-up.

Considering only the 1946 prices, it will be found that the capital cost per household works out at £180 for Scheme 2, and £164 for Scheme 4. The weekly cost chargeable to tenants, taking coal at 52s. per ton, is shown to work out at 10.34d. for Scheme 2, and 8.18d. for Scheme 4. With the cost of internal installations included, this becomes 11.9d. and 9.4d. respectively. It must be remembered that these prices were 1946, and have again risen in the meantime to 1947 prices. The weekly costs corresponding to the above are shown to be 11s. and 10s. 3d. respectively.

Attention is drawn in the memorandum to the fact that as the number of houses increases in a given estate, the weekly charges are reduced, owing to certain fixed items such as labour being more or less independent of the number of houses served. It is mentioned that for district heating estates smaller than about 300 houses, costs tend to rise sharply.

One further point to be noted from the memorandum is that the basis of heat supply per annum has been taken as 575 useful therms per household, of which 182 therms is for the hot water supply, and 393 therms for heating. The latter is assuming a 24-hour usage for 37 weeks, giving sufficient to maintain the living-room continuously at 65 degs. F. during average weather, with some heating in the hall and bedroom; or alternatively, a steady background heat throughout the whole of the house, in which case more topping-up would be required in the living-room say, in the evening, by a radiant source such as a solid fuel, gas, or electric fire. The importance to the household of the much greater freedom from damp and condensation with this steady supply of warmth is pointed out.

The above quantities of heat per annum have been taken from the district heating Working Group's report, wherein it is mentioned that the present average heat supply per annum per household is of the order of 330 therms, compared with the 575 therms above. In other words, the amount of heat supplied with the district heating scheme is nearly double that of existing methods.

(b) *The Interim Memorandum issued by the Sub-Committee of the Heating and Ventilating Reconstruction Committee,* is a general statement on the possible scope of district heating in this country, some reference to district heating abroad, and a reference to the factors involved in a combined heat and electric supply system. It contains no proposals or detailed working out of costs, and has therefore little value apart from an indication of the general state of investigation up to September, 1946, in this country.

(c) *The District Heating Working Group's Report to the Sub-Committee,* is at present a confidential document, but, as mentioned above, reference has already been made publicly by Mr. Stubbs to this report, and it has been distributed in a limited way, pending its ultimate publication as a Stationery Office document. I think I may say, by way of summary, that the report gives the working-out of a district heating scheme of considerable dimensions, as might apply to a town of

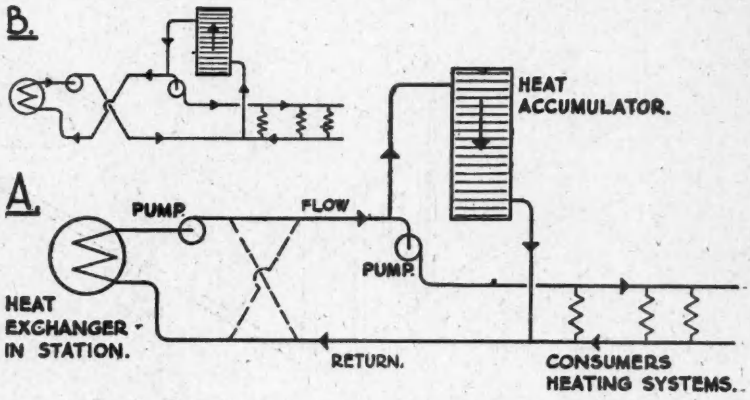
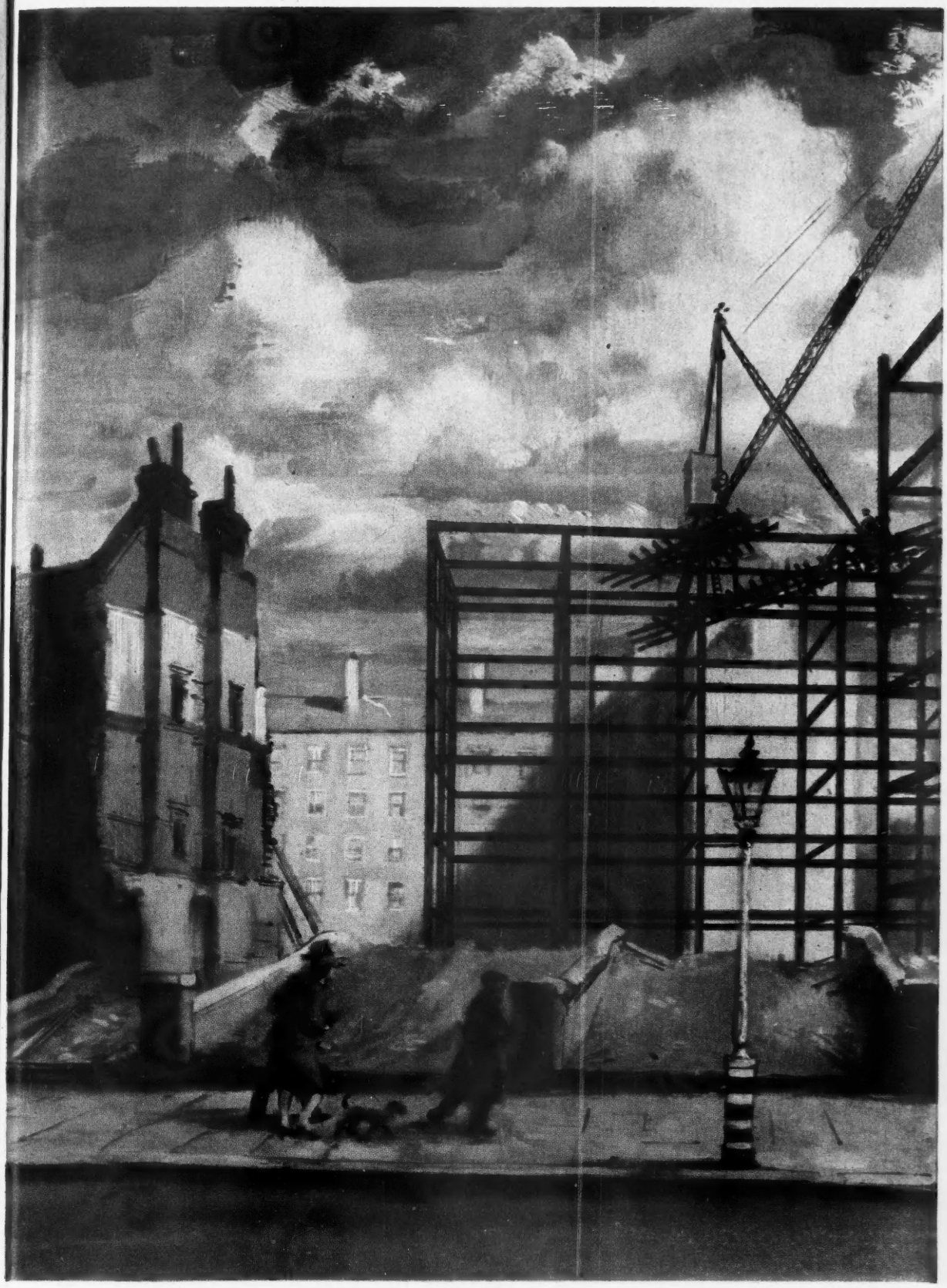


Fig. 7.—Thermal Storage Systems : A—charging ; B—discharging.



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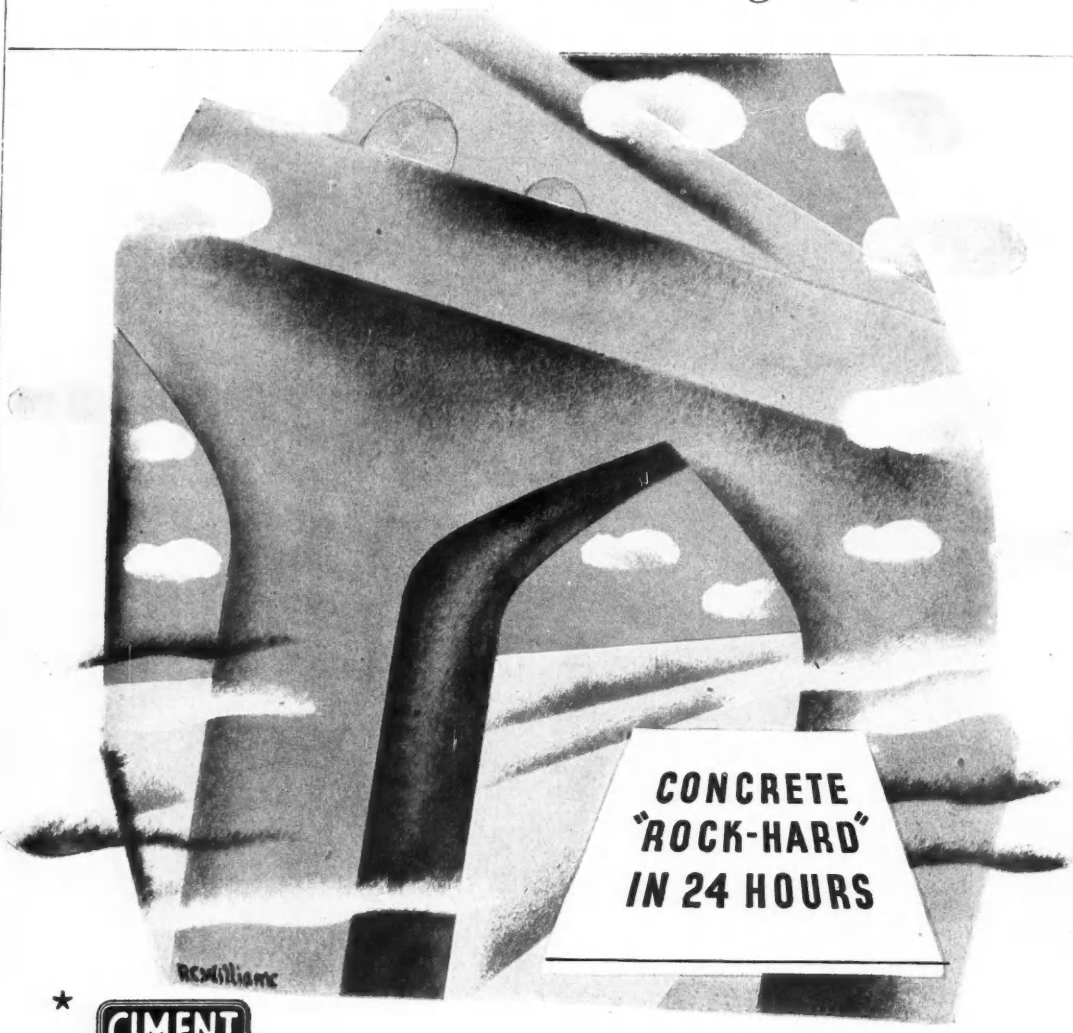

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250,000 inhabitants, covering an area of 25 square miles, and including not only housing but industrial areas, public buildings and commercial buildings.

The purpose of the scheme was to throw up problems involved in combined heating and electrical generating systems in this country, and the heat production centres round an assumed power station of 133 M.W. The output in therms per hour is 20,000, and the annual heat load to consumers is 42 million therms. The cost per therm at 1937 prices worked out to 4.62d. overall, this being the cost as delivered to the consumer. The scheme is based on the use of water at temperatures similar to those mentioned above as adopted in Russian practice.

The town was assumed to be divided up into 25 areas, each of one square mile, served by a main distribution system with one sub-station in each unit area of a square mile. From each sub-station, sub-distributing mains are taken through the streets to serve the imaginary blocks of buildings in a regular pattern, such as might occur in a new township.

On the electrical side it was assumed that the station would be a grid station, and the C.E.B. were concerned that it should include condensing plant, so as to operate as a normal station, should the heat load be insufficient to keep it going as a back-pressure station. The costs were included for this additional plant, and the division of cost as between the electrical output and the heat output have been treated in a manner which may be said not to favour unduly the district heating case.

A great deal of information is presented in the Report, in such a form that it was intended to be useful to future designers and also useful as a "yard stick" by which other schemes might be compared. By inserting appropriate factors for a particular case, in lieu of the ones selected in the Report, for each different part of the design, the ultimate answer could be determined in advance for any set of conditions.

Discussions with M.O.T.C.P.

It might be thought that towns of 250,000 population are few and far between, but the Committee had the advantage of some discussions with a representative of the Ministry of Town and Country Planning, and certain typical development plans were prepared, such as might occur in the case of a large town building satellite housing estates on its outskirts. Maps were prepared of the possible typical development which might arise after a period of five years and 10 years, and it was on the latter basis that the basic scheme of the report was prepared.

In view of the rise of prices which has occurred since 1937, the figure of 4.62d. cannot now be regarded as having much reality. The costs need to be overhauled to 1947 prices; and indications in general seem to be that the old figure would need to be roughly doubled. It will be seen, then, that a price of about 9d. per therm is produced, which is not much different from the order of the figures given in the Memorandum on Small Housing Estates, of 8.18d. to 10.34d. in 1946. The interesting point here is that due to the electrical link-up involving one large station serving an immense area, a main distribution piping network is necessary, which involves capital charges equal to about 1.18d. per therm in 1937, and, say, 2.36d. in 1947. This happens to be roughly the saving which is produced by taking waste heat as the source of heating, so that the saving due to the thermal electric method is eaten up by the additional charges in extra mains,

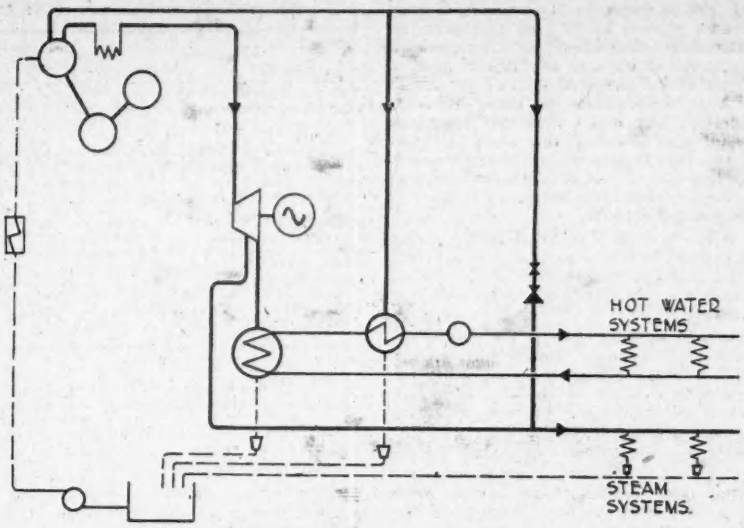


Fig. 8.—Dual Steam and Hot-Water Thermo-Electric System.

and it means that the small straight heat station can, from a financial aspect, give about the same results as the much bigger and more ambitious generating-cum-heating station. The advantage from a national point of view in the thermal electric method is, however, to be found in the saving of coal. In the Working Group Report it is shown that the annual coal saving for the township in question amounts to about 132,000 tons, or a saving of about .88 tons per head of population, per annum, and the coal used may be of a lower grade. This, of course, is a highly important consideration, which in these days may determine the adoption or otherwise of this method of heating.

Economics of D.H., and the Trend of Municipal Projects.

(a) One of the principal interests at the moment is housing, and the question arises as to what the householder can afford for a district heating service.

According to the Ministry of Labour Survey, the average expenditure in 1937-38 on heat, including cooking and lighting, in working-class property, was 6s. 5d. Of this it is estimated that about 4s. was spent on space heating and hot water. Due to the rise of price in coal since then, this 4s. might now be equivalent to 7s. or 8s. Under present rations of coal and coke the maximum which can be spent is about 5s. It is clear that unless district heating can be kept lower in price than appears to be the present trend, it will not show a financial saving to the householder, though as mentioned earlier, it can supply nearly double the heat for a slight increase on present budgets.

(b) It is important therefore to see how costs are made up, to see what the possibilities are of scaling down.

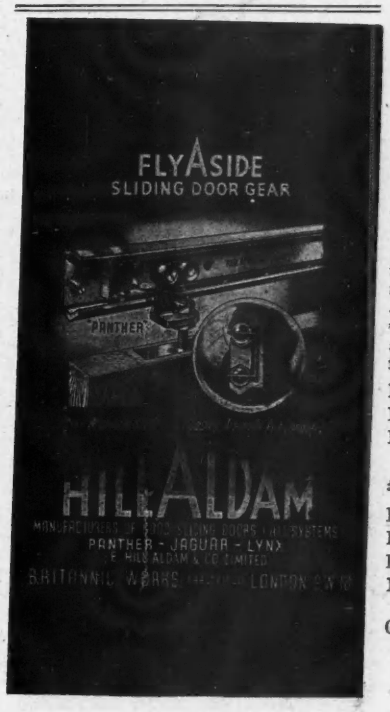
The simplest method of following this up is, perhaps, to take an actual example which has been worked out for such a scheme for a housing authority, and the author is indebted to Dr. Faber for permission to refer to figures worked out jointly with him, for a particular municipal body.

The example concerns an estate of 350 residences, including some flats. On the basis of 575 therms per household, and including certain community buildings in the estate and losses from mains, the hourly maximum demand comes out to 100 therms, and the annual consumption to 316,000 therms. Capital costs total £44,000, or £130 per household, and are made up as follows :—

Boiler plant and building	38 per cent.
Main piping and insulation	27 ,, ,,
Pipe ducts and sundry costs	35 ,, ,,

The annual running cost works out at £10,000 per annum, divided as follows :—

Fuel oil	57 per cent.
Electric current for pumps	4 ,, ,,
Labour	8 ,, ,,
Maintenance, Stores Insurances, Rates, etc. ...	7 ,, ,,
Capital charges, taking 15 years on boiler plant, and 30 years on remainder	24 ,, ,,



It can be shown in this instance, if coal is used instead of oil, the fuel price is reduced, but the labour price is increased. The total of oil fuel and labour here is 65 per cent., compared with 57 per cent., in the Memorandum on Small Housing Estates, using coal. Allowing for mains losses, and dividing the above by the actual therms sold per annum, the price per therm works out at 9.75d. For a typical house the annual cost becomes £23 8s., and the cost per week 9s.

It can also be shown that if the scheme is slightly increased to give a better scale of heating, of approximately 700 therms per house, the price goes up to 10s. 4d. per week.

It will be seen that of the above, the chief item is fuel. The bare net cost of fuel is about 5½d. per therm, using oil, and with coal, at £3 per ton, the figure would be about 4½d. per therm, allowing for mains losses in both cases.

Taking 575 therms p.a. again as the basis, the annual cost becomes £13.2 and £10.8 per annum respectively, which is already about as much as many people pay a year for coal.

The larger the scheme, the lower the incidence of the other charges per household, and it is apparent that if total costs must be kept down to the region of, say, £15 to £20 per annum, the scheme must embrace thousands of houses rather than hundreds, or else it must be linked up with some substantial industrial or commercial heating load.

Alternatively, if a scheme is big enough to be made thermal electric, the fuel cost figure will be greatly reduced, though with some rise in plant costs. Here the matter becomes too complicated to follow in detail, but it may be of interest to compare some of the schemes which have been worked out to date, and the list at the head of the next column covers some which have already been published.

It will be noted that figures are given for the price per therm, the number of therms per household, the cost per week, and the number of households.

Wythenshawe has some industrial load, and is thermal electric. Some increase must be allowed above 1945 prices.

Westminster Scheme.

Pimlico Flats scheme is a special case, on account of the highly concentrated load within striking distance of Battersea, where the exhaust steam from one of the house sets is being utilised for heating. It is not a general case.

The four straight heat stations come out between 6.5d. and 8.7d. per therm in 1946, which may mean about 7d. to 9d. to-day, but one or two of them restrict the supply to between 300 and 400 therms per annum. It may be questioned whether this would be acceptable, but it is obviously one way of keeping the weekly charge down.

The last two examples have already been referred to.

It will be seen that the thermal electric schemes come out to a lower price than the straight heating ones.

In general terms, the question of the application of district heating to present-day housing estates appears to resolve itself into :—

(i) Is the average householder prepared to pay more for heat than in the past?

(ii) Is the scheme large enough to keep the "other costs" as low as possible?

(iii) Is there a substantial load other than housing which can be picked up?

COMPARISON OF VARIOUS DISTRICT HEATING SCHEMES FOR HOUSING.

Name.	*Pence per therm.*	*Therms P.A. per house.*	*Cost per week per house.*	*No of Houses.*	*Date of Scheme.*
THERMAL ELECTRIC					
Wythenshawe (Manchester)	4.6	761	5s. 1d.	8,000	5/45
Pimlico (Flats) I	6.0	535	4s. 8½d.	1,604	9/46
II	5.5				
STRAIGHT HEAT STATIONS					
Urmston (Lancs.)	7.3	385	4s. 6d.	1,317	1/46
Priest Hill (Glasgow)	6.5 to 6.7	424	4s. 6d.	560	2/46
Benerton Heath (Wilts)	8.6	344	4s. 11d.	522	6/46
Bonnyrigg (Midlothian)	8.7	630	8s.	182	7/46
FOR COMPARISON					
Example (per Dr. Oscar Faber)	9.75	575	9s.	340	3/47
(*ibid*)	9.34	700	10s. 4d.	340	3/47
"Memorandum on District Heating for Small Housing Estates" Sch. IIB	10.34	575	9s. 7d.	241	8/46
Sch. IVB	8.18	575	8s. 10½d.	496	8/46

(iv) Are the conditions suitable for thermal electric application?

The answers to these questions appear to determine whether or not there is an economic case for district heating.

(c) Apart from the above schemes, dealing chiefly with housing, there have been published one or two others for dealing with reconstruction of blitzed city centres and serving commercial and public buildings. One such scheme was prepared for Coventry, another for Bristol, and another for a part of Birmingham. These schemes are interesting technically, but prices require radical revision to bring them up to date. Figures of the order of 3½d. to 4d. per therm appear in these schemes, on the basis of pre-war prices.

The above represents most of the data available on schemes either under construction or in contemplation, but there are known to be others at present in the report stage, such as the scheme for the City of London.

(d) We have devoted a good deal of time to the question of economics, but there is another side, namely, the advantages of district heating. These are generally referred to under the following heads: Convenience; reduction of smoke from domestic chimneys, saving in road traffic due to delivery of coal in small quantities and collection of ashes; elimination of much dirt and labour associated with attending to an open fire or small boiler; and saving of coal, and use of lower-grade coal.

To these might be added, so far as houses are concerned, the advantage of an abundant supply of hot water at all times available, and the avoidance of damp, chilly rooms, where no means of heating, other than open fires, is normally arranged.

Where a district heating system serves industrial, commercial and community buildings, it is possible to omit from these buildings a multitudinous array of relatively small boiler plants, with their attendant labour and inevitable low efficiency taken over a period, due to lack of control, unintelligent stoking, etc.

On the other hand, it is arguable that some of these advantages are obtainable by other means than district heating, such as for instance, in the case of housing; some of the more modern continuously burning solid fuel open fires can be used, saving much labour and producing smokeless combustion.

Similarly in large buildings, oil or gas firing of boilers may mean continuous high efficiency, and absence of the human element. All this is, no doubt, familiar ground, and I need not enlarge upon it.

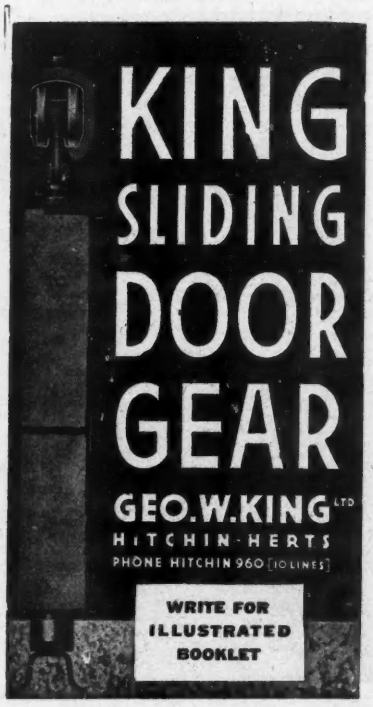
It appears to me, however, that for housing, the convenience of district heating cannot be over estimated, especially in these days of shortage of domestic help. It is its convenience which makes electric heating so popular in spite of its extra cost (1d. per unit equals roughly half-a-crown per therm). And so with district heating, one may feel confident that once it gets going in this country, and its advantages become apparent at first hand, it will speedily gain ground as the one civilised method of heating.

But, whereas electric heating means a prodigal extravagance of coal, at the rate of 43 lb. per therm, district heating can do the job with about 14 lb. per therm in a straight station, or about 8 lb. in a thermal electric.

Alternatively, if one is comparing gas, it must be remembered that a therm of gas is not the same as a therm of district heat, as the gas has yet to be converted into heat, which may mean a loss of 20 per cent. or more, whereas the district heat is 100 per cent. available. Furthermore, gas involves some form of combustion appliance on the premises requiring maintenance.

Future Possibilities.

(a) The pattern of events which one visualises for district heating development is first a start with direct heating stations for housing estates at isolated points, pos-



sibly round a larger town forming the nucleus, the estates thus becoming satellite towns.

When sufficient load has been developed in this way, a thermal electric station might be set up in the town, either by conversion of an existing electric generating plant, or by constructing a new one. This station would then be connected by main distribution pipes to the satellite groups, and the local heat stations would then become sub-stations of the main distribution. It would be essential with such a development to start out with a consistent policy in regard to design temperatures, pressure drops, pressures, etc.

The present trend of erecting super power stations at points remote from possible heat loads would have to be reviewed, and there are many considerations here which bring the C.E.B. into the picture. It may mean the reversion to smaller power stations, sited near to the heat loads, the smaller stations being linked to the grid and being run according to the heat load rather than the electrical load.

Anyone who attempts to tamper with the electrical generating industry is in for serious trouble, and proposals to go in for district heating linked up with power generation on any considerable scale involve considerations of long-term policies already laid down for power plant increases to meet deficiency of generating capacities. The latter has become so important recently that one cannot see district heating gaining a foothold in the present programme. As the opportunities for district heating are surely at the moment brighter than they have ever been, owing to the vast rebuilding programme which must be ahead somewhere, it would appear that now is the moment when plans must be laid, to bring it into the picture.

Has our national heat and fuel economy been properly thought out? I suggest that it has not, if district heating has not been included.

(b) Under the heading of future possibilities, one must presumably mention gas turbine stations and atomic energy stations. As to the former, with regenerative heaters, presumably there would not be much scope for collecting waste heat, or at any rate the hot gas discharge would not be easy to harness, say, for heating water for district heating. As to atomic energy, possibly the steam cycle would still be used, and the possibilities of district heating are improved. There is, however, I gather, a certain minimum size of such stations, which might involve spreading the heat over greater distances than have so far been considered.

(c) The last possibility which might be mentioned is one which has been seriously proposed, using gas as the fuel. The scheme assumes complete gasification of coal at the pit head, thus avoiding haulage by rail or sea, and also obviating coal storage sites at power stations, ash disposal, etc. The gas would be brought under pressure by long mains in a gas grid, from the pits to the towns, such as for example, London from the Midlands. The gas would be burned in boilers for generating electric current. The use of smaller stations becomes practicable with such a system, since it would be possible to site small gas-burning generating stations at any convenient point where heat loads, capable of using the waste heat, occur. Boiler non-availability, one of the bugbears of the super power station, would be overcome. At the same time, where a generating station was not warranted, gas could be tapped off and used direct in boilers for small district heating stations.

One is aware, of course, that certain coals only are fit for gasification, but the scheme has many attractive possibilities.

Discussion.

Mr. S. Pointon Taylor, F.R.I.B.A., M.T.P.I., the chairman, said he was sure everyone would agree that Mr. Kell's paper had been most illuminating, and contained a very large amount of useful information. He thought that on the whole Mr. Kell had been extremely judicial in his approach to the subject and had not tried to proselytise too much for district heating on the economic merits of the case.

Mr. E. L. Leeming (Surveyor to the Urmston U.D.C.) said reference was made in the paper to pipes running in front of or behind the buildings, but he did not suppose Mr. Kell had overlooked the fact that, in the case of terrace houses and so on, it was quite easy to run the pipes within the houses themselves, either through the floor or through the ceiling. On his way to London that morning the speaker had seen a very nice looking scheme of aluminium temporary houses, laid out in a series and fairly close together, and it had struck him how easy it would be to run the supply pipes through the shallow roofs of those single bungalows, carrying them on from one to the other through the short space in between.

Mr. Nelson Haden said there was one problem facing people who were designing district heating systems in this country at the moment which he had not heard discussed very much. At the moment most designs seemed to be based upon the amount of heat corresponding to the amount of fuel which it was thought the nation and the tenant of the low cost house could afford. He had recently been talking to people in the United States, who were appalled at the very low standard of heat and hot-water service in this country, and they thought that the experience which they had had might also be found in this country—namely, that when tenants found they had a reliable service for heating and hot-water supply their standards in those respects rose steadily. The people in this country who enjoyed district heating might require a higher and higher standard of heat and hot water, and that would involve a very difficult problem. It was necessary to consider to what extent provision should be made, at any rate so far as internal heating arrangements were concerned, for the increased standard which might prevail in the future.

Mr. Hartland Thomas said he had been interested recently in trying to find ways of using waste heat to advantage in industrial buildings, and he would like to ask Mr. Kell whether there was any future for collecting odd packets of waste heat in a city like London, with industries sprinkled amongst the houses, and using them in a district heating system, so that losses which took place now could be retrieved.

Dr. Oscar Faber said with reference to the use of waste heat, in 1925 the Bank of England had been heated almost entirely with waste heat from the generating station there. The generating station consumed oil in Diesel engines and produced electricity at a cost lower than that at which electricity could be obtained from the grid, and all the waste heat from that generating station had been obtained free of cost to heat a building which cost about £5,000,000. As far as its size was concerned, the Bank of England might well be compared to a very considerable estate. The water that circulated round the panel heating system which was installed throughout the building, came back to the engine-room and passed first through the cylinder jackets of the engines, just as the water circulation did in a motor-car, and picked up all the heat which was given up by the engine in its cylinder jacket. The water then went into waste heat boilers, which were heated from the exhaust gases of the engines. The thermal efficiency of the big public generating stations, as given in the Electricity Commissioners' annual reports, was approximately 20 per cent.—*i.e.*, if one compared the thermal value of the fuel that went into the generating station with the heat value of the electricity which came out, one found that the latter was about 20 per cent. of the former and roughly 80 per cent. of the thermal value of the fuel was wasted. By the adoption of the system which he had described, a thermal efficiency of about 85 per cent. had been achieved at the Bank of England, so there was a very strong case to be made for combining electricity generation and heating in suitable cases, and it was not necessary to have huge schemes to make that practicable.

Mr. Kell, in reply, said he saw no reason why a large scheme should not collect such waste heat as was available, provided that it was of suitably high temperature. Waste heat was often of a rather low temperature, and it might be difficult in that case to make use of it. With regard to the proposed Bankside power station, he did not know whether the City of London scheme included the taking of heat from that station, but he had a strong suspicion that that was what was behind it. The case of London needed looking into on a very large basis, and the Working Group had made some preliminary investigations in that connection.

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Manchester Exhibition of Builders' Plant.

An exhibition of builders' plant, equipment, tools and new materials is to be held at the Government Building Trade Training Centre, Denton, Manchester, from July 17 to 26. The aim of the exhibition is to bring to the notice of all engaged in the industry the small plant, equipment, etc., which has been designed to help speed up production and also to help in meeting the universal shortage of labour. The sponsors are the Building and Civil Engineering Joint Committee, under the chairmanship of the Regional Director, Ministry of Works.

A NEW CONCEPTION OF MANAGEMENT

3.—Job Analysis: Skill Involved

(FROM A SPECIAL CORRESPONDENT)

LAST WEEK we discussed that part of the function of Management which is concerned with job analysis, particularly the What, the How and the Why of each operation done by any and every operative whether he be chiefly a mental worker, e.g., an administrator or a manual worker, either a skilled craftsman or labourer. We now turn to the second part of the job analysis, which deals with the skill involved in each operation. This part of the job analysis formula brings out important information necessary to supplement the What, How and Why, and to assess the difficulties of the work tasks involved in the job.

It consists of a listing and an explanation of the basic factors which must be considered in analysing any job. These elements bring out the manual skills, knowledges, abilities and other characteristics required of a worker by his job, regardless of whether that job is manual, craft, professional, clerical or any other type. It is the purpose of the analyst to obtain and record all the information necessary to discriminate between jobs and to establish the degree of difficulty of any job. Specific factors or components which comprise this part of the job analysis formula are set forth in this article.

RESPONSIBILITY. — Supervisory responsibility is that which directs the work of others and assists and instructs them in the work. The exercise of supervision requires high efficiency on the supervisor's part so that he may obtain a high utilisation of the skills required by the job. The degree of his responsibility is measured by the numbers of workers and the type of work supervised. It is limited by the nature and extent of the supervision required and given.

Non-supervisory responsibility is the responsibility for preventing damage to equipment, materials or processes, for preventing loss of the product, for preventing injury to the worker and to others and for co-operating with fellow workers and outsiders. This is measured by the extent of possible damage or loss, the nature and extent of possible injuries, and the nature and extent of co-operation required. It is limited by the closeness of the supervision received, the relative likelihood of spoliage or damage, and the existence of checks and safety devices which protect others from the consequences of the workers' errors.

JOB KNOWLEDGE.—The total responsibility in any business concern should, ideally, be shared by all workers, from the managing director down to the office boy. Naturally they do not share that responsibility in equal degree, but at all grades it is necessary that they should have adequate job knowledge for the part which they have to play, and should have a clear conception of the extent of their personal responsibility and the degree to which they are expected to rely on their own initiative. Job knowledge is measured by the amount and complexity of practical knowledge which the worker must possess, whether this knowledge is gained by actual on-the-job experience, prior training, or by both. It is limited by the nature of instructions received regarding work tasks and by the degree of supervision to which it is subjected. The considerations which a job analyst must take into account in ascertaining how far workpeople in the various grades possess job knowledge are of the following order:

Does the job require the reading of blue prints?

Is the worker required to follow written instructions?

Does the job require knowledge of machine operation, machine set-up, of running repairs?

Does the job require mathematics? If so what kind (shop, bookkeeping, actuarial, engineering, production, statistics, and records)?

Does the job require the use of formulas?

What jigs, tools, machines or instruments are used; what materials are used?

What must the worker know about these materials?

Does the worker inspect or check?

Must he know details of preceding and subsequent processing operations?

MENTAL APPLICATION. — The analyst must assess the degree of continuity of thought, concentration, mental planning, or mental alertness demanded by the job because of the diversity of the work or variety of problems. He must ascertain the extent to which each worker is required to exercise initiative. He must know how far the worker is adaptable and the degree of versatility required as indicated by the variety of skills necessary. The extent to which the worker is called upon to exercise his independent judgment should be studied. The attention and vigilance that the worker must exercise to avoid accident or the failure of the job or wastage of materials should be noted.

All of these facets of mental application are measured by the complexity, scope and variety of tasks and skills required; the importance of the decisions made; the extent of planning necessary; and the frequency of occurrence of problems and the attention necessary for their solution. They are limited by the repetitive nature of the tasks, the degree of supervision by a higher authority, and the speed of reaction necessary to meet changing working conditions.

DEXTERITY AND ACCURACY.—The next phase in determining the skill involved is to study the manual or manipulative ability required to perform the work to the degree of accuracy or precision required. Factors to be taken into account are the dexterity, quickness, deftness or expertness of the worker, the co-ordination of sight and other senses with the muscles required to perform the tasks of the job, and the degree of precision required in handling the product or material and in the adjustment or manipulation of tools and equipment.

* * *

We have based this and the preceding article on the "Guide for Analysing Jobs," issued by the War Manpower Commission of the United States of America to a staff which had itself been selected and trained for the purpose of selecting personnel to fill all sorts of positions from machine tenders, packagers, transport workers and unskilled labourers up to general managers and others carrying a high degree of administrative responsibility. We in this country had our control of engagement orders and other devices for directing labour to those industries where it was needed. It is doubtful whether we achieved such satisfactory results from our somewhat unimaginative bureaucratic methods as were made available to American industry as the result of scientific selection. This was not because our qualities of planning and management are poorer or less developed than the American's. The causes go much deeper. There are fundamental differences between the trades union set-up in the two countries. The greater development of mass production in America has greatly increased the ratio of semi-skilled to highly skilled labour. Machines have been developed to do the donkey work hitherto performed by unskilled labour. There is relatively little difference between the remuneration of highly skilled and semi-skilled labour; there is a great difference between that of semi-skilled and unskilled. Therefore, whatever a man's antecedents may have been or from whatever country he may originally have hailed, he is encouraged and almost driven by the stress of economic circumstances to acquire some degree of skill, and the powerful unions of the semi-skilled trades help him rather than hinder him from doing so. And—a point of some significance—payment by results raises the artisan in the social scale and provides him with additional amenities in life.

(To be continued.)

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Telephone Change.

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Building Apprentices' Sports.

AN athletic meeting of the London Building Trade Apprentices' Sports and Welfare Association will be held on Saturday, July 26, at 3 p.m., on the sports ground at the Duke of York's headquarters of the Territorial Association, King's-road, Chelsea. The Minister of Works has kindly consented to be present and to distribute the prizes. Admission will be by programme costing 1s., obtainable from the office of the Association at 3-7, Old Queen-street, S.W.1, or from area secretaries. The events are open to all apprentice members. The price of the programme includes entry fees, and contains entry forms.

A number of the events will be inter-area races, and a challenge cup will be held by the area obtaining the most points for all the events.

THE SCOTTISH BUILDER
NEW BUILDINGS

Dunfermline.—Dean of Guild Court passed plans by Scottish Special Housing Association, Ltd., 19, Palmerston-pl., Edinburgh, for 150 houses at £185,000.

Glasgow.—G. Thomson & Co., 17-21, Laird-st., propose offices and other buildings, for which the architects are Beveridge & Dallachy, 248, West George-st., Glasgow.

Glasgow.—Extensions for the University of Glasgow, for which the architects are Keppie & Henderson, 196, West Regent-st., Glasgow.

Glasgow.—Baptin, Shaw & Norton propose alterations and additions at Blythswood, for which the architects are Miller & Manson, 15, Blythswood-sq., Glasgow.—Alterations and additions proposed for the Govan Shafting and Engineering Co., and the same for Toffolo Jackson & Co., Ltd., for which the architect is James Taylor, 196, Regent-st., Glasgow.

Paisley.—Dean of Guild Court passed plans submitted by George Dobie & Son, Ltd., tobacco manufacturers, for extensive alterations and additions at Four Square Works, Greenhill-rd., Paisley, at estimated cost of between £70,000 and £80,000.

Pollokshaws.—Block of offices to be erected by G. Cohen, Sons & Co., Ltd., Cogan-st., Glasgow.

FUTURE CONSTRUCTION
CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those with an asterisk are advertised in this number. The dates at the heads of paragraphs are those for the submission of tenders; a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained.

BUILDING

JULY 1.

†Eastbourne T.C.—Kitchen and dining-room at Hampton Park Senior School. B.E. Dep. £2 2s.

JULY 3.

Blythe R.D.C.—24 houses at Victoria Mill-rd., Framlingham, together with site works. H. W. Lovell, architect, Council Offices, Rendham-rd., Saxmundham. Dep. £2 2s.

JULY 4.

Kirkburton U.D.C.—10 houses at Thurstonland-rd., Farnley Tyas. Joint Clerks, Town Hall. Dep. £2 2s.

Leeds T.C.—Police Section House at Belle Isle estate. City A. Dep. £2 2s.

†North-Eastern Housing Association, Ltd.—60 houses at Smithfield site, Egremont, Cumberland. J. W. Tibbs, Secretary, Metrovick House, Northumberland-rd., Newcastle-on-Tyne, 1. Dep. £2 2s.

JULY 5.

Edinburgh T.C.—Work in various trades for extension to maternity unit, Eastern General Hospital. City A., City-chbrs.

Havant and Waterloo U.D.C.—20 houses at site No. 1, Leigh-rd., Havant. E. and S. Dep. £2 2s.

†*Isle of Ely C.C.—Children's offices and open shelter at Whittlesley new sschool site. R. D. Robson (A.), County A. Dep. £2 2s.

JULY 7.

Ballymena T.C.—40 houses with roads and services at Farm Lodge estate. McCarthy & Lilburn, chartered surveyors, 47, Scottish Provident-bldgs., Belfast. Dep. £5.

Brentford and Chiswick T.C.—Rebuilding 2 flats and 1 house at Brentwick-gdns. B.E. and S. Dep. £3 3s.

***Brightlingsea U.D.C.**—Houses at Chapel-rd. estate: (a) Two blocks of four; (b) five pairs. S. Dep. £2.

Central Hospital Visiting Committee, Hatton, nr. Warwick.—Works at Central Hospital: (1) 2 houses for junior medical officers and 16 staff houses; (2) 4 staff houses. C. H. Elkins (L.), Shire Hall, Warwick. Dep. £2 2s.

Droxford R.D.C.—8 Airey houses at 2 sites. A. L. Bishop, C., The Square, Bishop Waltham, Southampton. Dep. £2 2s.

Gt. Yarmouth C.B.—3 shops with flats over at North Denes estate. B.E., 15, Regent-st.

Haslingden T.C.—17 pairs of three-bedroom houses and 6 pairs of one-bedroom houses at Longshoot estate. B.E. and S. Dep. £2 2s.

†*Northampton C.B.—74 houses at Dallington Fields estate. T.C. Dep. £2 2s. Tenders by July 24.

Oldham C.B.—44 "Airey" rural-type houses at Limeside estate. A. L. Hobson, B.E. and S. Dep. £2 2s.

South Westmorland R.D.C.—12 bungalows and site works at Kirkby Lonsdale. Council Offices, 30-34, Lowther-st., Kendal. Dep. £2 2s.

Ventnor U.D.C.—3 pairs of houses at 2 sites. G. Poole, E. and S. Dep. £2 2s.

†West Riding C.C.—Infants' School at Monteney-cres., Parson Cross, Sheffield. County A.

JULY 8.

Aldridge U.D.C.—32 houses at Pelsall. C Dep. £2 2s.

†*Beaminster R.D.C.—2 houses at North Bowood site, Netherbury. R. Leigh, C. Dep. £2 2s.

Berkhamsted U.D.C.—20 houses at Durrants Farm estate. Robert E. Hulse (L.), E. and S. Dep. £2 2s.

Chesterfield R.D.C.—60 Airey houses at 3 sites. J. B. Wikeley, M.Eng., AM.I.C.E., Rural Council House, Chesterfield. Dep. £2 2s. by cheque.

Ilford B.C.—Five blocks of three-storey flats at Budoch-dr., Goodmayes. L. E. J. Reynolds, O.B.E. B.E. & S. Dep. £3 3s.

Marshland R.D.C.—60 Airey at 3 sites. S. G. Bailey (L.), Council Offices, Alexandra-rd., Wisbech.

JULY 9.

Droxford R.D.C.—4 houses at Swanmore. A. L. Bishop, C., Council Offices, The Square, Bishop's Waltham, Southampton. Dep. £2 2s.

Leeds T.C.—Alterations to Transport Depot, Kirkstall-rd. City A. Dep. £2 2s.

***Monmouthshire C.C.**—Nurses' quarters and maternity blocks at County Hospital, Panteg. Colin L. Jones (F.), County A. Dept., Queen's Hill, Newport, Mon. Dep. £2 2s.

Plymouth.—Offices at Elliott-rd., Prince Rock. L. F. Vanstone and Partners, National Provincial Bank-chbrs., Tavistock.

JULY 11.

***Derby C.B.**—6 houses at Francis-st. Thos. W. East (F.), Boro' A. Dep. £2 2s.

Derby C.B.—4 shops at Sussex Circus, Roe Farm estate. Thos. W. East (F.), Borough Architect. Dep. £2 2s.

***Erith T.C.**—Repairs at 1-4, Charles Cottages, Manor-rd. B.E. and S. Dep. £1 1s.

Llandilo R.D.C.—12 houses with access roads at 3 sites. R. P. Walters, S., Council Offices, Crescent-rd. Dep. £2 2s.

JULY 12.

***Durham County Standing Joint Committee.**—8 Police houses and office at Harrowgate Hill, Darlington. County A., Court-la., Durham.

***Towcester R.D.C.**—60 Airey houses at various sites. C. Dep. £3 3s.

JULY 13.

***Fareham U.D.C.** — Rebuilding "Blair," Crofton-la., Stubbington. E. and S. Dep. £2 2s

JULY 14.

***Chesterfield T.C.**—Extension at Markham Municipal Hostel, Hipper-st., together with general repair work to existing buildings. W. S. Wilson, M.I.Mun.E., B.E. and S. Dep. £2 2s.

Ellesmere Port U.D.C.—62 houses at Stanney estate. E. and S. Dep. £3 3s.

***Hornsey B.C.**—45 houses at Springfield-ave. J. H. Melville Richards, B.E. & S.

Kidderminster R.D.C.—26 houses and 4 bungalows, together with site works. E. and S. Dep. £3 3s.

***Rochford R.D.C.**—3 pairs of houses and 2 pairs of bungalows at The Drive. A. N. Box, S. Dep. £3.

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JULY 15.

†*Felixstowe U.D.C.—Repairs and alterations at Spa Pavilion. C. Dep. £3 3s.

JULY 16.

Carshalton U.D.C.—2 houses at Balfour-rd. E. and S. Dep. £2.

Cheshire C.C.—Reinstatement and completion of construction at Helsby Grammar School. E. M. Parkes (F.), County A. Dep. £2 2s.

Manchester T.C.—7 lock-up shops, 4 flats and 7 garages at Greenwood-rd., Northenden. City A. Dep. £1 1s.

North Westmorland R.D.C.—44 houses at various sites. A. Knewstubb, Architect, St. Andrew's-chbrs., Penrith, Cumberland.

JULY 17.

Brackley R.D.C.—16 dwellings at Middleton Cheney. G. Forsyth Lawson, 25a, High-st., Banbury, Oxon. Dep. £2 2s.

Cosford R.D.C.—44 houses at Pit Meadow, Lavenham. Edward Fincham (A.), 9, Palmers-ave., Grays, Essex. Dep. £2 2s.

Cosford R.D.C.—(1) 4 pairs of houses and laying of water main at Hitcham and Polstead, Suffolk; (2) 8 houses at Rockalls-rd., Polstead. Raymond Erith (F.), Dedham House, Dedham, nr. Colchester. Dep. £2 2s. each.

†*Southgate B.C.—52 flats in 3 blocks at Reservoir-rd. B.E. and S. Dep. £2 2s. Tenders by August 15.

JULY 18.

Durham T.C.—110 houses at Sunderland-rd. estate. City E. Dep. £2 2s.

Gloucs. C.C.—Private street improvements County S. Dep. £2 2s

***Salop C.C.**—Alterations at New Hall central kitchen, Wellington. A. G. Chant, County A. Dep. £2 2s.

JULY 19.

***Hatfield R.D.C.**—23 houses and external works at Essendon. Edgar F. Cull, C. Dep. £2 2s.

JULY 21.

***Frome U.D.C.**—28 houses at Broadway site. B. H. Parkes, S. Dep. £3 3s.

***Saffron Walden R.D.C.**—8 houses at 2 sites. C. Dep. £3 3s.

JULY 26.

***Hove T.C.**—94 houses in 5 groups at Sunninghill. B.S. Dep. £3 3s. each group.

MISCELLANEOUS

JULY 10.

St. Albans T.C.—Demolition of shelters and C.D. structures. City E. and S. Dep. £2 2s.

JULY 14.

Battersea T.C.—Demolition of trench shelters. B.E. and S. Dep. £2.

Epsom and Ewell T.C.—Demolition of trench shelters. B.E. and S. Dep. £2 2s.

PAINTING, ELECTRIC LIGHTING, MATERIALS, ETC.

JULY 7.

Isle of Ely C.C.—Decorations and repairs at various schools. R. D. Robson (A.), County A.

Liverpool Corporation Water Works.—Painting, colouring and papering of various premises at Lake Vyrnwy. Water E., 55, Dale-st., Liverpool, 2.

ROADS, SEWERAGE AND WATER WORKS

JULY 7.

Hendon T.C.—Roads and sewers at Pursley-rd., Mill Hill. B.E. and S. Dep. £2 2s.

Horsham U.D.C.—Roads and sewers at Spencer Farm estate. E. and S. Dep. £3 3s.

JULY 8.

Hepton R.D.C.—Construction of reservoir, contract No. 1; erection of pumphouse, contract No. 2. A. Brooksbank, M.I.C.E., 14, The Exchange, Bradford, Yorks. Dep. of £2 2s. each contract.

Newton Abbot R.D.C.—Roads and sewers at Rydon estate, Kingsteignton. S. Dep. £3 3s.

Wolverhampton C.B.—Roads and sewers, Cemetery-Bushbury. B.E. Dep. £2 2s.

JULY 9.

Manchester T.C.—Street works at Hulme Redevelopment area. City S. Dep. £2 2s.

Marlow U.D.C.—Surface dressing of roads. S.

Portsmouth T.C.—Roads and sewers at Riders-la., Stockheath. City E. Dep. £5 5s.

JULY 10.

Deal T.C.—Widening of St. Richard's-rd. B.E and S. Dep. £2 2s.

Kidsgrove U.D.C.—Street works at Park-ave. E. and S. Dep. £2 2s.

JULY 11.

Droitwich T.C.—Sewer extension at Newland-rd. B.E. and S. Dep. £2 2s.

Edinburgh T.C.—Roads and sewers at Inch Housing Development Area. City A.

Leicester T.C.—Roads and sewers at 2 sites. City S. Dep. £2 2s.

Towcester R.D.C.—Site works at Gayton site. Sir John Brown, A.E. Henson & Partners (FF.), 30, Billing-rd., Northampton.

JULY 14.

Grimsby C.B.—Roads and sewers at Nunsthorpe estate site, No. 2A. J. V. Oldfield, M.Inst.C.E. B.E. and S. Dep. £2.

JULY 16.

Aberdeen C.C.—Reinforced concrete reservoir, meter house and water main at Hopetoun, City Road S. and Engineer, 25, Union-terr., Aberdeen. Dep. £3 3s.

Denton U.D.C.—Construction of about 2½ miles of stoneware concrete-tube spun-iron and steel sewers, from 7 in. to 36 in. dia., with manholes, etc., and construction of sewage treatment works extensions. G. B. Kershaw & Kaufman, 1, Victoria-st., Westminster, S.W.1. Dep. £5 5s.

JULY 19.

Ely R.D.C.—Sewers, house connections, manholes, sewage pumping station, cast-iron rising main, and sewage disposal works, etc., at Littleport. C. Dep. £5.

JULY 21.

Nottingham T.C.—Laying and pointing of water mains at certain parishes. E. and general manager, Water Dept. Dep. £3 3s.

JULY 28.

Witney R.D.C.—Supply and laying of approx. one mile of 3-in. and 4-in. spun-iron water mains, etc. Howard Humphreys and Sons, 17, Victoria-st., Westminster, S.W.1. Dep. £3 3s.

JULY 31.

Strood R.D.C.—Construction of sewers, rising mains, three pumping stations, ejector station and sewage purification works, etc. F. W. S. Stanton, M.I.C.E., 5, Victoria-st., Westminster, S.W.1. Dep. £5, payable to R.D.C.

PUBLIC APPOINTMENTS

Full details of Public Appointments open will be found in the advertisement pages of this and previous issues.

GENERAL BUILDING WORK

(LONDON)

Addiscombe.—Houses. — Addiscombe Garden Estates, Ltd., 1-3, Addiscombe-rd., S.W., are to build 19 detached and semi-detached houses in Crossways, Addington Village Estate. The architect is E. F. Starling, A.R.I.B.A., 1, Addiscombe-rd., Croydon.

Balham. — Flats. — Wandsworth B.C. has appointed Mr. R. G. Covell, F.R.I.B.A., 5, Mitcham-rd., S.W.17, as architect, and Messrs. Smith and Bowl, Terminal House, Grosvenor-gdns., S.W.1, as quantity surveyors for the erection of 87 flats in four blocks on the Balham High-rd. site.

Battersea.—Flats.—Borough Surveyor's plans for 20 flats in four-storeyed block at Westbridge-rd. have been approved by B.C.

Beaumont-street. — Hospital. — Of the King Edward the Seventh Officers' Hospital, following destruction during the war, is proposed. The architects are Messrs. T. P. Bennett & Son, F.R.I.B.A., 43, Bloomsbury-sq., W.C.1.

Bermondsey.—Warehouse.—The B.C. have received an application to build a new warehouse on the north side of Rotherhithe-st. adjoining Platform Stairs, from Platform Wharf Bonded Warehouses, Ltd. Plans are by Mr. Harold Cave, Parliament-mansions, Abbey Orchard-st., S.W.1.

Bermondsey.—Buildings. — The B.C. have approved the following drainage plans: G. E. Nield & Sons, A.R.I.B.A., 310, Upper Regent-st., W.1, for George Whichelow, Ltd. to rebuild offices at 2, 4 and 6, Maltby-st., S.E.1; Arthur T. Russell, L.R.I.B.A., 9, Duke-st.-hill, S.E.1, for A. L. Morgan, to reinstate premises at 96, Tooley-st.; White & Traviss, 26, Portugal-st., W.C.2, for Huntley, Son & Phillips, to rebuild 18, 20, 22 Culling-rd.; Anderson, Forster & Wilcox, FF.R.I.B.A., 9, Stone-bldgs., Lincoln's Inn, W.C.2, for Samuel Jones & Co., Ltd., to provide canteen and lavatory accommodation at No. 1, Earl-rd.; and A. Ayres, P.A.S.I., for Bermondsey Borough Council, to rebuild block of flats at Redriff Estate (Block 9).

Borough.—Extensions.—Are to be carried out at the Borough Polytechnic, Doyle-st., S.E.1. Plans prepared by Norman & Dawbarn, 5, Gower-st., W.C.1.

Clapham. — Flats. — Wandsworth B.C. is to acquire the sites of 9-29, Lessar-ave. for development by the erection of blocks of flats; the council is also to acquire the sites of 82-88, Clapham Common (South Side) and the sites of 43-51, Orlando-rd. for the same purpose.

Edmonton.—Rebuilding.—Of a large factory, Bridport-st., N.18, is proposed by the Dunlop Rubber Co., Ltd. Plans by the company's architect John W. Wilson, F.R.I.B.A., Fort Dunlop, Erdington, Birmingham.

Greenford.—Extensions.—To premises are proposed by Perivale Motors, Ltd., Western-av. The architects are Wallis, Gilbert & Partners, 5, Cromwell-rd., South Kensington, S.W.7.

Hammersmith.—Buildings.—The B.C. has given consent to following building application: For erection of two blocks of office buildings at rear of Minford-gdns. (Collcutt & Hamp, architects, 126, Wigmore-st., W.1).

Hammersmith.—Flats.—B.C. is to approach M.H. with plans to place contracts in 1947 for 80 flats at Westwick- and Minden-gdns. (four blocks); Frithville-gdns (four blocks); and Coningham- and Stowe-rds. (two blocks).

Hammersmith.—Flats.—B.C. to make application to L.C.C., for sanction to borrowing £49,437 to erect 28 flats (Block C) at Riverside-gdns. extension. The contract has been placed with Tersons Ltd., 2, Seward-st., E.C.1, at £46,748.—Sanction has been received by B.C. to borrow £19,120 for the acquisition of sites at Askew-rd., Becklow-rd. and Dorling-rd. for housing purposes.

Hampstead.—T.B. Clinic.—Mr. E. B. Glanfield, F.R.I.B.A., 6, Raymond-bldgs., Grays Inn, W.C.1, has been appointed architect for a tuberculosis dispensary to be erected on a site at 54, Eton-av.—Mr. Glanfield has also been appointed architect for the adaptation of a prefabricated hut as a welfare centre at 80-86, Sumatra-rd.

Heathrow.—Warehouse.—Penguin Books, Ltd., propose to build a new warehouse and distribution depot at Heathrow, with a floor area of 60,000 sq. ft. The architect is Ralph Tubbs, A.R.I.B.A., 8, Clarges-st., W.1.

Hornsey.—Flats.—S. Collins, 9, Stanhope-rd., N.8, proposes to build a block of six flats at Stanhope-rd. The architect is C. W. Boswell, Westbrook Barrington-rd., N.8.

Ilford.—Rebuilding.—Of seven houses at Courtland-av. is proposed, subject to approval of War Damage Commission. The architect is Edward Meredith, F.R.I.B.A., 6, Victoria House, High-rd., Goodmayes, Essex.

Islington.—Housing.—The B.C. have purchased for housing purposes from the trustees of W. H. Callow Estate the freehold interest in the following properties: 1-23 (odd), Bemerton-st.; 166-182 (even), Copenhagen-st.; 2-12 (even), Pembroke-st (factory); 14-26 (even), Pembroke-st.

Kensington.—Flats.—B.C. propose the erection of 18 flats on the Kilfield-gdns. site.

Park Royal.—Factory, etc.—Is to be built in Old Oak Common-la., N.W., for Concrete Slab Co., Ltd. The architects are Hugh Roberts & Davies, 13, Suffolk-st., S.W.1.

Peckham.—Homes.—Church Army Housing, Ltd., 55, Bryanston-st., W.1 propose to build two blocks of old persons' homes, cottages and maisonettes, Dorwood-st., S.E. The architects are A. & J. Soutar, FF.R.I.B.A., 8, William the Fourth-st., W.C.2.

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St. Pancras.—Child's Welfare Centre.—The Governors of the Foundling Hospital have drawn up a scheme for converting the war-damaged shell of a building on a site in Coram's-garden into a child welfare centre at a cost of £3,000.

St. Pancras.—Housing.—The B.C. propose to acquire for housing purposes land in the neighbourhood of Willingham-ter. as follows: Nos. 1 to 24 (consecutive), Willingham-ter.; Nos. 57 (and at rear of 59 and 61), and 63 and 67 (odd), Leighton-rd.

Stoke Newington.—Branch Library.—The B.C. is compulsorily to acquire a site at 97-99, Belgrave-rd. and 88-92, Princess May-rd. for erection of a branch library.

Stoke Newington.—Flats.—187, Stoke Newington High-st. is to be converted by the council's architect into 18 flats and flatlets.

Stoke Newington. — Repairs. — After war damage are to be carried out at Victoria-gr., for Silvro Manufacturing Co., Ltd. Plans have been prepared by Howard & Souster, FF.R.I.B.A., 81, Piccadilly, W.1.

Thornton Heath.—Alterations.—And additions are to be made to branch premises, Farnley-rd., S.E., for South Suburban Co-operative Society, Ltd. Plans by C. M. Swannell, F.R.I.B.A., 6, Raymond-bldgs., Grays Inn, W.C.1.

Tooting.—Flats.—Wandsworth B.C. has instructed the Borough Architect to prepare plans for the erection of a three-storey block of flats on the Crockerton-rd. site.

Tooting. — Flats. — Wandsworth B.C. has appointed Mr. Basil Hughes, F.R.I.B.A., 34, Queen Anne-st., W.1, as architect, and Messrs. Fleetwood, Buss and Anns, 5, Verulam-bldgs., Gray's Inn, W.C.1, as quantity surveyors, for the erection of 17 blocks of flats, comprising 266 dwellings, on the Hazelhurst-rd. site. The estimated cost is £447,000.

Tottenham.—College Extensions.—The Governors of St. Katharine's Training College, White Hart-la., Tottenham, N.17, propose to carry out extensions to the training college, including erection of new hall.

Walthamstow.—Remodelling.—Of the Markhouse-rd. Secondary Mixed Infants' school is proposed by E.C. The architect is F. H. Heaven, A.R.I.B.A., Old Monoux Building, High-st., E.17.

Wandsworth.—Telephone Exchange.—A new exchange, "Vandyke," is to be introduced to cover Wandsworth Town and Earlsfield areas.

Wandsworth.—Houses.—Mr. C. Lovett Gill, F.R.I.B.A., 43, Russell-sq., W.C.1, has prepared plans for 8 houses on the Ironmill-pl. site, Wandsworth.

Wembley.—Foundry.—Is to be erected at Station Wharf, Alperton, for Mining & Chemical Products, Ltd. The architect is E. Maxwell Fry, F.R.I.B.A., 63, Gloucester-pl., Portman-sq., W.1.

Whitecross-street. — Dwellings.—The Peabody Donation Fund are considering plans for the rebuilding of their large estate at Whitecross-st. and Roscoe-st., E.C.1, severely damaged during the war. The architect is Victor Wilkins, F.R.I.B.A., 12, York-bldgs., Adelphi, W.C.2.

Willesden.—Additions.—Are to be made to the factory, School-la., N.W.10, of the Willesden Rubber Co., Ltd. The architects are Clifford Tee & Gale, Moorgate, E.C.2.

(PROVINCIAL)

Birkenhead.—Four-storey block and nurses' home and structural alterations to General Hospital, Park-rd., for Health Committee. Plans by L. Barnish (F.), 58, Rodney-st., Liverpool 1 (estimated cost, £250,000).

Bolton.—T.C. approved additions to works at Holland-st., Astley Bridge, for John Ashworth (1902), Ltd.

Burnley.—T.C. propose central transport garage at Aqueduct-st.

Burnley.—T.C. approved: Alterations at Manchester-rd. and Saunder Bank, for Samuel Taylor, Son & Platt (F.A.), architects, 74, Manchester-rd.; omnibus garage and depot at Waterloo-rd., for Ribble Motor Services, Frenchwood, Preston; Central Motors, Ltd., propose garage, etc., at Cliviger-st.

Bury.—T.C. approved hotel at Parkhills-rd. for Bury Brewery Co., Ltd., The Brewery, George-st.

Coventry.—Board of Governors of Coventry and Warwickshire Hospital propose rebuilding outpatients' and casualty departments at Stoney Stanton-rd., at £64,000. Plans by W. S. Hattrell & Partners (F.), 1, Queen's-rd.

Gateshead.—Additions proposed to factory at Queensway, Team Valley estate, for Bushing Co., Ltd. Architects: Cackett, Burns Dick & MacKellar, 21, Ellison-pl., Newcastle-on-Tyne.—Site plan prepared for warehouse at Bridge-st. for Tyne Tees Shipping Co., Ltd. Architects: Hetherington & Wilson, County-chbrs., 52, Westgate-rd., Newcastle-on-Tyne.

Lichfield.—R.D.C. propose housing site at Oakdene estate, Chasetown.—Staffs E.C. propose County Primary school.

Manchester.—T.C. approved:—Additions to works at Piercy-st., Ancoats, for Joseph Stubbs, Ltd.; clothing factory at Waterloo-rd., Hightown, for P. S. Bass; additions to works at Grant-st., Miles Platting, for West's Gas Improvement Co., Ltd.; Primary schools at Heaton Park and Charlestown.

Manchester.—T.C. approved: Garage and spirit store at Abingdon-st. and Canal-st., for J. Moston & Sons; alterations at Princess-st. and George-st., for Simpson & Godlee, Ltd.; rebuilding offices at St. James'-sq., John Dalton-st., Tatham, Worthington & Co.; additions to works at Forge-la., Bradford, for R. Johnson & Nephew, Ltd.; additions to works at Clayton-la., Clayton, for Anchor Chemical Co., Ltd.; additions to offices, Park-la., Cheetham, T. Wainwright & Sons, architects, 10, Victoria-st., Liverpool.—E.C. propose County Primary school at Crossacres estate, Wythenshawe.

Mansfield.—T.C. approved:—Extensions to factory at Nottingham-rd., Field Mill Upholstery Co., Ltd.

Margate.—Grand Hotel and Cafe (Cliftonville), Ltd., considering reinstatement of premises. Plans by W. R. H. Gardner (F.), 9, Cecil-sq., Margate.

Matlock.—John Smedley, Ltd., Lea Mills, propose factory.

Matlock.—Hansons', Ltd., Brewers, Kimberley, Notts, propose hotel at Dale-rd. North, Darley Dale.

Middx.—E.C. to acquire land at Centenary Park, Harrow, for kitchen and dining-rooms for Chandos Secondary school.

Newburn-on-Tyne.—U.D.C. to erect 100 Aluminium houses at West Denton.

Newcastle.—Garage and workshop and petrol station to be erected at Coutts-rd. for F. Bamborough. Plans by T. Cornelius, 33, Elmfield-gdns., Newcastle.

Newcastle-under-Lyme.—T.C. approved: Ice-cream factory at Dunkirk, for Dairy Maid Ices, Ltd.; warehouse and garage at Old Roebuck-la., for Blockleys, Ltd.; additions to works, Sutton-st., W. Tagg & Co.; office block at Oxford-rd., for C. Henshall.

Oldham.—E.C. propose completion of Counthill Secondary school. Plans by J. W. Hitching, Borough Schools' Architect, Education Offices, Union-st. West.

Oxford.—City Council approved plans by R. F. Dodd, Best & Stevens, architects, 21, Turl-st., Oxford, for conversion of 22 and 24, Bardwell-rd. into 12 flats.

Radcliffe.—T.C. approved: Additions at Bradley Fold Works, Little Lever, for Dobson & Barlow, Ltd.

Rochdale.—T.C. approved: Additions at Hudson-st., for Jacksons' Motors, Ltd.; additions at Dunlop Cotton Mills, Silk-st., Castleton, for Dunlop Cotton Mills, Ltd.

Salford.—T.C. approved:—Clothing factory at Kent. st., Lower Broughton, for Gold Bros. & Shilco; extensions at cotton waste factory, Dickinson-st., for S. & Z. Jaffe; clothing factory at Teneriffe-st., Broughton, for M. Lavenberg.

South Shields.—T.C. to erect four British restaurants. Plans by B.S.

Strood.—R.D.C. approved layout by E. and S. for houses and flats at Henley-st., Luddesdown.

Sunderland.—J. A. Jobling & Co., Wear Glass Works, Sunderland, to erect factory at Leopold-st., Sunderland.

Urmston.—Lancs. E.C. propose special school for sub-normal children.

York.—T.C. approved factory at North-st. for Bell, Tuck & Bainbridge.

TENDERS

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modification.*
¶ Denotes *accepted by H.M. Government departments.*

Alford (Lincs).—Conversion of Primitive Methodist Chapel into corset factory, for Kettering Co-operative Corset Society, Ltd.: *Bradshaw Bros. (Contractors), Ltd., Alexandra-rd., Skegness, Lincs.

Baldock, Herts.—Completion of Weston Way estate by erection of non-traditional houses, for U.D.C.: *George Wimpey & Co., Ltd. (subject to M.H. approval).

Battersea.—B.C. has approved the estimate of £41,023 submitted by the Borough Surveyor's Direct Labour Department for the erection of 27 flats at 19-20, Bolingbroke-grove. The Council has also approved an estimate of £39,700, submitted by the Borough Surveyor's Department, for the erection of 24 4-roomed flats at the eastern end of Weybridge-st.

Bedford.—50 houses at Aylesbury-rd., for T.C.: *H. C. Janes, Ltd., 189, High Town-rd., Luton, £59,897.

Bedford.—60 Orlit houses at Harrowden-rd. site, for T.C.: *Kirk & Kirk, Ltd., Atlas Works, Putney, £73,560.

Bideford.—20 houses at Barton estate, for T.C.: *H. Pope, 11, Furzebeam-ter., East-the-Water, £24,960.

Bootle.—Eight dwellings at corner of Harris-dr. and Orrell-rd., for C.B. W. A. Harrison, M.Eng. (L'pool), M.I.C.E., M.I.Mun.E., B.E. & S.: *Harold Higginson & Co., Ltd., 43, Carr-la., Birkdale, Southport (subject to M.H. approval).

Bridgnorth.—24 houses for T.C.: *T. E. Lay & Son, Underhill-st., Bridgnorth (12); *Horne & Meredith, 7, Whitburn-st., Bridgnorth (12). (Extension of contracts.)

Cardiff.—Telephone exchange: *Gee, Walker & Slater, Ltd., 100, Park-la., W.1.

Chester. — Handbridge County Secondary Modern school, for E.C. C. Greenwood (L.), City E. & Architect. Excavations, foundations, drains, etc.: *J. W. Flather, Ltd., Grosvenor-st., Ellesmere Port, Ches, £19,280; structural steelwork: *E. F. Blakeley & Co. (Liverpool), Ltd., Beaufort-st., Birkenhead, £10,738.

Chester-le-Street.—Factory at Newcastle-rd., for W. T. Henley's Telegraph Works. Architects: Waterhouse & Ripley, Staple Inn-bldgs., London, W.C.1: *Higgs & Hill, Ltd., Leeds; factory for Rodney Dresses, Ltd. Architects: J. Gibson Co., & Son, Central-chbrs., Chester-le-Street: *W. Norman, 3, West-la., Chester-le-Street.

Doncaster.—12 houses at Norwich-rd., Wheatley Park, for T.C. F. O. Kirby, B.E.: *Direct Labour Dept., £13,632.

Droitwich.—24 Airey houses, for T.C.: *George Harrison & Son, Droitwich, £32,886.

Eastbourne. — Reconstruction of Imperial Hotel, Devonshire-pl. H. Hubbard Ford (A.), 24, Cornfield-rd., Eastbourne, architect, C. F. Baker, F.S.I., 51, Gildredge-rd., Eastbourne, quantity surveyor:—*J. G. Robinson & Sons, Ltd., Cornfield-terr., Eastbourne, £79,387.

Gateshead.—Additions to factory for Bren Manufacturing Co., Ltd., Team Valley estate. Architects: Cackett, Burns Dick & MacKellar, 21, Ellison-pl., Newcastle-on-Tyne: *Anglo-Scottish Construction Co., Ltd., Gosforth, Northumberland.

Halesworth, Suffolk.—Post Office: *Ames, Ltd., 1, Deneside, Gt. Yarmouth.

Hammersmith.—28 flats at Riverside-gdns., extension scheme (Block "C"), for B.C.: *Tersons, Builders (Carter Paterson & Co., Ltd.), 2, Seward-st., Goswell-rd., E.C.1, £46,748 (subject to necessary consents).

Hartlepool.—16 houses at Middle Warren site, for T.C. T. H. Miers, B.E.: *T. M. Stonehouse, Ltd., Osborne-rd., West Hartlepool.

Islington.—Repair and adaptation of Nos. 29, 30 and 31, Penn-rd., for B.C.: *Hussey Bros. (Builders), Ltd., £5,604.

Kingston-upon-Thames.—9 flats at Bittoms site, for T.C.:—*H. T. Jones & Co., 6, Griffiths-rd., Wimbledon, S.W.19, £10,702 (subject to M.H. approval).

Lichfield.—20 Airey houses at Cherry Orchard estate, for T.C.: *T. Richards (Chasetown), Ltd., 54, High-st., Brownhills, £28,300 (subject to M.H. approval).

London.—Alterations and improvements to chemical engineering building, University College, Gower-st., for London University. Plans by Professor A. E. Richardson, R.A. (F.): *Dove Bros., Ltd., Cloudesley-pl., Islington, N.1.

London (Admiralty). — *Hebburn-on-Tyne:* Borings, Wm. Coulson, Ltd., Crossgate Works, Hebburn Quay, Durham.

London (Air Ministry).—Contracts to value of £500 or over for week ended June 21:—Painting work: N. S. Long, Ltd., Poulton-le-Fylde, Lancs; J. W. Alder & Sons, Sunderland; C. J. Else & Co., Ltd., Matlock, Derbyshire. Civil engineering work: Crosby & Co., Ltd., Farnham, Surrey. Building work: A. Richmond & Sons, Retford, Notts. Dismantling and re-erection of timber towers: J. Gerrard & Sons, Ltd., Swinton. Agricultural maintenance work: Clark Bros., Swindon; D. M. Contractors, Reading.

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¶**London (M.O.W.).**—Contracts placed by M.O.W. for week ending June 19:—

London: Vicarage School, Vicarage-la., East Ham, Temporary school buildings, W. E. Chivers & Son, 171, Plaistow-rd., E.15; Trafalgar-sq., New pumping chamber, Holloway Bros. Ldn.), Ltd., Bridge Wharf, 157, Millbank, Westminster. *Ayrshire:* Public school, Saltcoats, Temporary school classrooms, Douglas Peebles, Factory-pl., Saltcoats, Ayrshire. *Carmarthenshire:* Crosshands County school, Temporary school buildings, Isaac Jones (Llanelly), Ltd., Temple-st. Joinery Works, Llanelly. *Ches:* W.A.A.F. Camp, Harwarden, nr. Chester, Alteration and adaptation, Roberts & Williams, Queen st., Queensferry, nr. Chester; Bromborough, nr. Chester, Telephone Exchange, Hopley (Little Sutton), Ltd., Station-rd., Little Sutton, Wirrall. *Cumberland:* St. Patrick's R.C. school, Carlisle, Additional classrooms, E. Anderson, 54, Upperby-rd., Carlisle. *Durham:* R.C. School, Tudhoe, Temporary classrooms, T. Manners & Son, Peel-st., Bishop Auckland; St. Bede's R.C. school, Jarrow, Additional classrooms, J. E. Gardner, Ltd., 136-138, St. Cuthbert's-rd., Gateshead-on-Tyne 8. *Essex:* County Primary school, Mauney's-rd., Romford, Kitchen and dining-room, Ed. Smith (Romford), Ltd., 1, Western-rd., Romford; Reddon Court Secondary school, Hornchurch, Kitchen and dining-room, E. Scott Hale, Globe-rd., Romford; Westcliff High school, Kitchen and dining-room, J. C. Flaxman & Son, 114, Southchurch-rd., Southend-on-Sea; Billericay County Primary school, Kitchen and dining-room, Coster & Ward, Harold-gdns., Wickford, Essex. *Glamorgan:* Treorchy, Remploy factory, Gee, Walker & Slater, Mount Earl, Bridgend, Glam. *Gloucester:* M.O.E., School Programme, Bristol, Pitchmastic flooring, Rock Asphaltic Co., 163, Hammersmith-rd., London. *Hants:* Hightown-rd. C. school, Ringwood, Temporary classrooms, Geo. Shears, Ltd., Oxford-rd., Bournemouth; C.E. school, Ringwood, Temporary school buildings, Furneaux, Ltd., 251, Barrack-rd., Christchurch, Hants. *Herts:* Temp. Housing Programme, Bishops Stortford, U.D.C. Area No. 2, 40 Aluminium houses, E. Scott Hale, Ltd., Globe-rd., Romford, Essex. *Kent:* Half-way-st., Sidcup, Installation of G.P.O. Sorting Office, Hill & Gurn, 15, West-st., Bromley, Kent *Kirkcudbrightshire:* The Academy, Kirkcudbright, Temporary classrooms, Robinson & Davidson, St. Catherine's-gate, Annan-rd., Dumfries. *Lanarkshire:* John's Loan Estate, Biggar, Arcon houses, John Logan, Ltd., Lanark-rd., Carluke, Lanarkshire.

Lancs: Preston, Remploy factory, Herbert Joyce & Sons, Martin's Bank-chbrs., Clifton-st., Blackpool. *Lincs:* Senior school off Harrington-st., Bourne, Temporary school buildings., Brick & Son, Broad-st., Stamford, Lincs; M/A & M/I, Victoria Lodge, Broadway, Woodhall Spa, Conversion to flats, A. F. Kirkby & Son, Witham-rd., Woodhall Spa, Lincs; Wrangle school, Main-rd., Wrangle, Temporary school buildings, Bradshaw Bros., 117a, Loughborough-rd., Leicester; G.P.O., Market Rasen, Automatic Telephone Exchange, R. M. Phillips & Son, Estate Yard, Briggs; Ashby Senior C. school, Scunthorpe, Lincs, T.S. buildings, Bell & Newbert, 165, Frodingham-rd., Scunthorpe, Lincs. *Middx:* Embassy Hall, Enfield, Alterations, Townsend & Collins, 2, Brick-la., Enfield; Weldon Park school, Harrow, Kitchen and dining-room, Francis Jackson (Devel.), Ltd., Glebe-av., Ickenham; St. Ann's Primary school, Gillingham-rd., Cricklewood, Temporary school buildings, Geo. Moss & Son, Cranleigh Wharf, St. Margaret's-rd., Southall. *Midlothian:* 102, George-st., Edinburgh, Adaptation to erect Relief Tel. Exchange, Edinburgh Building Cont., Ltd., 32, Castle-st., Edinburgh. *Monmouthshire:* Durham-rd. school, Newport, Kitchen and dining-room, J. H. Williams & Son, Ltd., Kelvedon-st., Newport, Mon. *Notts:* Baridge school site, Nuthall-rd., Nottingham, Temporary school buildings, G. A. Pillatt & Son, Guorn-rd., Nottingham; Cottesmore school, Ashburnham-av., Nottingham, Temporary school buildings, G. J. Rice, Cyprus-av., Wollaton-rd., Beeston, Notts. *Staffs:* County Secondary Boys' school, Dartmouth-st., Stafford, Temporary school buildings, J. McLean (Bldrs.), Ltd., Coven, Wolverhampton. *Surrey:* Richmond-rd. County school and St. Luke's school, Kingston, Temporary school buildings, Limpus & Son, Ltd., 7, Kingston-hill, Kingston-on-Thames, Surrey. *Sutherland:* Dornoch Academy, Dornoch, Temporary classrooms, Alexander Sutherland, Duke-st., Golspie, Sutherland; Public school, Fodderty, Dining-room and scullery, Mackenzie & McDonald, Blackwells-st., Dingwell, Ross-shire. *Warwickshire:* Secondary Modern school, Bierton-rd., Yardley, Birmingham, Temporary school buildings, G. Green & Son, Ltd., 132, Monument-rd., Birmingham 16; Cockshutt Hill Modern school, Yardley, Birmingham, Temporary school buildings, F. Deeley, Ltd., 208, High-st., Harborne, Birmingham. *Wilts:* Avenue Senior school, Warminster, Temporary school buildings, R. Butcher & Son, George-st., Warminster, Wilts. *Worcs:* Samuel Southall school, Worcester, Temporary school buildings, Geo. Foster (Cont.), Ltd., Leamington-rd., Broadway, Worcs; Council school, Bridge-st., Redditch, Temporary school buildings, J. J. Gallagher & Co., 28-36, Lea-rd., Birmingham 11.

London (War Dept.).—Works contracts placed

by War Dept. for week ended June 14:—Denbighshire: Hutting improvement, B. E. Pugh & Son, Shrewsbury. London, N.W.10: Electrical work, Page & Girling, Ltd., London, W.13.

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Mablethorpe and Sutton.—Erection of public lavatories at Central Promenade, for U.D.C. Eric Jordan, M.I.M.E., E. & S.: *H. Doughill, Victoria-rd., Mablethorpe, £3,493.

Mablethorpe and Sutton.—40 houses at Waterloo-rd., for U.D.C. G. A. Jellicoe (F.), M.T.P.I., 12, Gower-st., W.C.1, architect. Quantities by Venning & Partners, 16, Gower-st., W.C.1: *H. Doughill, Victoria-rd., Mablethorpe, £54,271.

Malton.—Eight houses at Hutton Ambo, for R.D.C.: *L. J. Oldfields & Son, Castlegate, Malton.

Manchester.—Cooling tower and pump house at British Alizarine Works, Westinghouse-rd., Trafford Park, for Imperial Chemical Industries, Ltd.: *Russell Building & Contracting Co., Ltd., 165, Plymouth-gr., Chorlton-upon-Medlock, Manchester.

Middlesbrough.—66 houses at Thorntree estate (Scheme 23), for T.C. J. A. Kenyon, B.E.: *A. Cubitt, Middlesbrough (10); *G. H. Rogers, Middlesbrough (10); *R. H. Bailey & Son, Middlesbrough (46).

Middlesbrough.—Additions to Constantine Technical College, for E.C. T. N. Mitchell, Education Architect, Woodlands-rd., Middlesbrough: *Northern Counties Building & Civil Engineering Co., Ltd., Middlesbrough, £13,111.

Middleton.—100 Aluminium houses at Boarshaw estate and Ash-st., for T.C. J. Pollard (L.), B.E.: *Ashton Smethurst (Builders), Ltd., Suffield-st., Middleton.

Millom.—Eight houses with roads and sewers at two sites, for R.D.C. J. Hankey, S. & Sanitary Inspector: *L. Fairclough, 70, Lapstone-rd., Millom, Cumberland, £11,700.

Newcastle-on-Tyne.—12 houses at Blakelaw site, for City Council. R. G. Roberts, City A., 18, Cloth Market, Newcastle: *George Bainbridge, Lanercost-dr., Newcastle-on-Tyne (in lieu of tender withdrawn).

Oldham.—172 No Fines houses at Limeside estate, Waterloo, for T.C. A. L. Hobson, B.E.: †G. Wimpey & Co., Ltd., The Grove, Hammersmith, London, W.6, £215,731.

Skegness.—Renovation and restoration of Skegness Pier, for Skegness Pier Co., Ltd.: *Bradshaw Bros. (Contractors), Ltd., Alexandra-rd., Skegness, Lincs (approx. cost, £15,000).

Smethwick.—50 B.I.S.F. houses at Roebuck-la., for T.C.: *Gee, Walker & Slater, Ltd., Uttoxeter Old-rd., Derby, £65,350.

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Stockport.—16 flats for aged people at Bridge Hall estate, for T.C. W. F. Gardner, B.S.: F. Leigh, Reddish, Stockport, £5,614.

Stockton-on-Tees.—Factory at Church-rd., for J. D. Ord & Co., Ltd.: *W. S. Hutton, Ltd., Post House Wynd, Darlington.

Wandsworth.—34 houses at Fugedown estate, for B.C.: *Associated Builders (Streatham), Ltd., 33, Ferrers-rd., Streatham, S.W.16, £40,750 (subject to W.D.C. approval); repairs to 17 houses at Ritherdon-rd.: *Triggs & Co., Ltd., Lambourn Works, Mackay-rd., S.W.4, £15,940.

Wapping.—Reconstruction of warehouse, for Weber, Smith & Hoare, Ltd., wharfingers, 7, Mincing-la., E.C.3. Stock, Page & Stock, 18, St. Thomas-st., S.E.1, architects:—*Mansfield & Neil, Ltd., 136, Minories, E.C.3.

West Bridgford.—26 houses at Valley-rd. estate, for U.D.C. R. Dewsbury, M.Inst.M. & Cy.E., E. & S. Quantities by Gleeds, 21, Victoria-st., Nottingham: *M. D. Sweeney & Palmer, Ltd., Beechdale-rd., Aspley, Nottingham, £34,433.

West Ham.—Erection of Prince Regent-la. Primary school, Canning Town, for B.C.: †Corporation Works Dept., £47,242.

West Lancs.—62 houses at Netherton, for R.D.C.: *Sefton Building Co., Ltd., Ormskirk-rd., Aintree, Liverpool.

Westminster.—Repairs, etc., at Infants' Hospital, Vincent-sq., for Governors. Easton & Robertson (FF.), 54, Bedford-sq., W.C.1, architects:—*Holloway Bros. (London), Ltd., Bridge Wharf, Grosvenor-rd., S.W.6.

Weymouth.—32 flats at Lanehouse Rocks-rd., for T.C.: *R. V. Curtis, £30,444.

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SIR MALCOLM STEWART ON THE OUTLOOK

The forty-seventh ordinary general meeting of the London Brick Company, Ltd., was held on May 30th, at Kingsway Hall, Kingsway, London, W.C., Sir P. Malcolm Stewart, Bt., O.B.E., Hon. LL.D., D.L., chairman and one of the managing directors, presiding.

The Secretary, Mr. A. Guthrie Stewart, read the notice convening the meeting, and Mr. F. H. Parrott, F.C.A., of Messrs. Derbyshire & Co., the auditors, read the report of his firm.

The Chairman said : Ladies and Gentlemen,—If you will turn to the balance-sheet, on the right-hand side under the heading "Assets, less liabilities," you will see that the current assets, comprising cash, British Government securities and other investments, amounting together to £900,392, plus sundry debtors and advance payments, and stocks in trade, total £1,868,404. This is an increase of £169,235 on last year's figure.

From this total have been deducted the current liabilities, consisting of sundry creditors and accrued charges, provisions for contingencies and taxation, provision for the dividend on the Preference stock for the half-year to December 31st, 1946, less income-tax, and provision for the interim dividend on the Ordinary stock, less income-tax, payment of which was made on March 29th this year. The total of these liabilities and provisions is £912,360.

The increase this year in the figure for sundry creditors and accrued charges is mainly accounted for by heavier purchases following expansion of production and by amounts owing to Government departments for prisoner of war labour.

EXCESS OF CURRENT ASSETS

The excess of current assets over current liabilities, etc., is £956,044, compared with £1,156,637 in the previous year, a reduction of £200,593.

Dealing with the fixed assets, you will see that there has been added for freehold land purchased the sum of £4,700. The addition to the item cottages, sundry buildings, etc., is £12,278, and there has been added £190,879 to works buildings, etc., less deduction of £1,733 for sales. The total of the fixed assets is £2,243,011.

If you will turn to the left-hand side of the balance-sheet you will notice that the capital authorised and issued and general reserve remain at the same figures as last year. The balance of profit and loss account at £114,118 shows an increase of £5,531 over last year's figure, after providing for the dividend on the Cumulative Preference stock for 1946 and the payment on the Ordinary stock of the interim dividend of 12½ per cent.

LARGER PROFIT AND DIVIDEND

With regard to the profit and loss account, the profit on trading and income from various sources is up by £171,781 at £291,108, and this year does not include any dividend from the subsidiary company. As has been stated in the report of the directors, again no provision for depreciation has been provided. The directors do not recommend the payment of any further dividend in respect of the year ended December 31st, 1946.

The outstanding and satisfactory feature of the profit and loss account for last year is the fact that adequate profits have been earned from trading to permit our paying to our stockholders a dividend of 12½ per cent. gross, which is 2½ per cent. more than that declared in the previous year, when to pay 10 per cent. we had to transfer £40,000 from contingencies account.

THE STAGE OF CONVALESCENCE

Stockholders can congratulate themselves that their business has entered the stage of convalescence, although full recovery has yet to be achieved. The story of last year's struggle is one of persistent effort in the face of dire difficulties, largely the aftermath of a prolonged world war ; many of these difficulties were of a character which no industrial organisation, however powerful, could overcome. Nevertheless, we succeeded in more than attaining the forecast of production aimed at when I last addressed you.

We hoped, I stated, to produce a full day's shift output by the end of June. This was achieved and we had the gratification of at last getting out of the red and recording a margin of profit as production increased.

It was further stated by me that our ultimate objective was to get full day and night shifts running before the end of the year, but I doubted if this could be attained. Thanks, however, to the determined efforts of our works managers, of our production and engineering staff and to the co-operation of our employees we commenced running night shifts by the end of September, when the output was brought up to some 66 per cent. of capacity.

NATIONAL SHORTAGE OF BRICKS

For these results the greatest credit is due to our management and employees, who, despite all difficulties, have brought us along so well in the race to restore our efficiency. However, it is the last lap that offers the worst obstacles to be overcome and such is the scarcity of suitable labour, materials and stores for replacements and renewals that it is clear we shall have to be favoured with better circumstances than those prevailing to-day if we are, before the end of the year, to get our production up to close on that of our full productive capacity. This is essential to meet the national shortage of bricks.

Let there be no misunderstanding. It is nothing less than full production, based on efficiency, which can once again not only fully restore the fortunes of our company but enable us to bear, without undue burden to our cost of production, the highest standard of conditions for our employees. These are our objectives, combined with a policy of lower prices to the consumer and improved returns to our stockholders. To achieve them, production must be pressed up to 100 per cent. of capacity through the regaining of the highest efficiency. Thus, as in pre-war years, can we once again demonstrate that private enterprise can be mindful of and benefit the national interest.

To protect the future house building programme I would remind you that when we long foresaw the famine in bricks we made and stacked, despite uneconomic conditions, no fewer than 500 million bricks towards the close of the war period. These are now largely absorbed in the building of standard brick houses, the demand for which has not been diminished by the glamour and variety of prefabricated houses, built at a higher cost not fully appreciated if amortisation is provided for. I do not criticise their construction—desperate needs call for drastic measures.

LABOUR PROBLEM

It is no exaggeration to state that conditions in the past year were fraught with utmost difficulties only surpassed by the record inclement weather experienced early this year. We were, in March of last year, very short of labour. Thanks to the Ministry of Works, we were allotted German prisoner-of-war labour, a force of which was steadily built up, and they still to-day represent 50 per cent. of the total of our employees. A considerable number of these are unskilled and lack the will to work. Many seek early repatriation and fear their chances will be diminished if good work here makes them useful. The demand for the repatriation, as soon as is practical, of German prisoners is a rightful demand. It is just the fortunes of war that have landed them here. Their comrades who fought against us and were not captured are free. How can they be expected to work for a bare pittance and give the same result as British workers earning many pounds a week and enjoying an incentive to procure more production. It is just not reasonable. Fairer treatment would have sent them home contented and sympathetic to the methods employed by British industry, whereas many will return discontented and critical. A great opportunity has been lost for these men to make known on their return home the spirit of British freedom and fair play.

Our own British labour to-day inclines slowly to decrease. Here I would emphasize that the adverse comments which have been made upon employment conditions in the brick industry generally do not apply to this company, which has been among the pioneers in this country in such matters as welfare, holidays with pay, sports arrangements and profit sharing and pension schemes.

I need not enlarge upon the difficulties experienced—and still with us—of obtaining new machinery and the materials and skilled labour needed to recondition our works, some of which have been idle for six years. The major repairs necessary to large numbers of our kilns have required the laying of many millions of bricks in face of a famine in bricklayers.

PRODUCTIVE EFFICIENCY

The possession of our own extensive engineering resources at this time has been a most valuable asset. The strain upon our engineering division has been, and continues to be, heavy. Not only is it having to grapple with the immediate short-term problem of restoring our former productive capacity, but it must also devote itself to the longer range problem of an even higher degree of mechanisation.

Stockholders may have read recently in the Press of the report of a Technical Committee appointed by the Minister of Works to consider the efficiency of brick production. Your company's works pre-war were perhaps the most efficient in the world. We aim constantly at a higher degree of productive efficiency, and a great deal of development work is under way. The regular contact which, before the war, we maintained with mechanical and research developments in other countries has been reopened, and visits by members of our technical staff have already been made to five other countries. Neither the art of brickmaking nor this company can stand still and, with this firmly in mind, we are adding to our technical and research staffs and their equipment.

Similarly our sales organisation has been further expanded, not because any sales effort is needed at the present time, but so that we may give the best possible service to the building trade under present and future difficulties. In December we opened a northern district office in Leeds in continuation of our policy of sales decentralisation under which we have already established similar offices at Birmingham and Bristol.

LIAISON WITH MINISTRY

In the matter of distribution we have maintained close liaison with the Ministry of Works and have been glad to have its guidance in this difficult period when we felt that we were carrying too great a responsibility in allocating deliveries. We therefore welcomed the Ministry's introduction of a building materials priority scheme in April, 1946.

Our war-time policy of stacking bricks to the limit of works space and of available labour enabled us to meet the Ministry's several requests to make large deliveries into areas such as certain parts of Scotland, where serious shortages of bricks were hindering the housing programme. Indeed, we were the only source to which the Government could turn in such an emergency.

During the year we increased our transport fleet. Again, our object has been to render better service. It is pleasant to report that we frequently receive spontaneous letters from other road users thanking our drivers for their courtesy on the King's highway.

The demand for our hollow blocks has continued to increase throughout the year ; the two works manufacturing this material were able to keep running throughout the war and were, therefore, in better condition to meet requirements. These are, however, greatly in excess of our output and we are, therefore, in the process of doubling the productive capacity of our Clockhouse works. These extensions will be upon the most modern basis and will, in part, be utilised to manufacture the hollow walling block which we have produced and developed in the face of some official discouragement ; our building bye-laws still frown upon the use of this type of material which facilitated the rapid production of many war-time buildings.

After hearing an account of the exceptional difficulties encountered in the past year stockholders will, I am confident, cordially join the Board in an expression of gratitude to our staff attached to all departments of our business and to all our employees at our works and depots for their loyal support and co-operation.

CURRENT YEAR'S PROSPECTS

You will expect me to make some forecast as to the trading prospects of the current year. The exceptional difficulties of 1946 were nothing compared with the early grim events of this year, so adverse in their consequence. Frost and snow isolated many works, floods stopped production at our largest claypit at Stewartby and these phenomenal difficulties were enhanced by shortage of fuel to keep our kilns running. Our only hope of recovery is to be favoured with helpful conditions from now onwards to the end of the year if we are to make good the earlier losses sustained.

If conditions improve and our present production again increases satisfactorily, then our trading results may possibly approximate those secured last year. But it must be borne in mind we are, unfortunately, faced with a grave shortage of labour due to the repatriation of German prisoners, this at a time when British labour is so scarce. These adverse factors militate against the obtaining of efficiency, as does the delay in procuring plant for maintenance and contemplated extensions.

Please realise I cannot to-day forecast trading profits equal to those earned last year, but I can assure you no effort will be spared to procure them and to restore the fortunes of your company, which, thanks to its sound financial structure, has successfully weathered the storms of war and will once again establish its pre-eminent position in peace.

The report and accounts were adopted.

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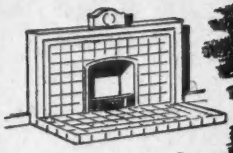

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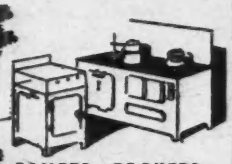

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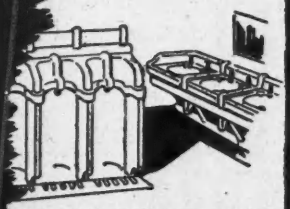

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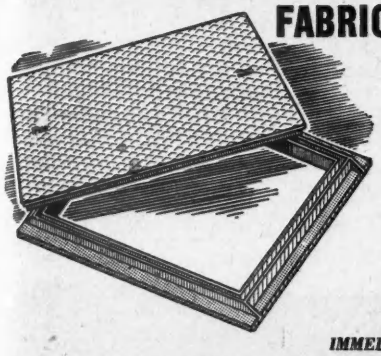

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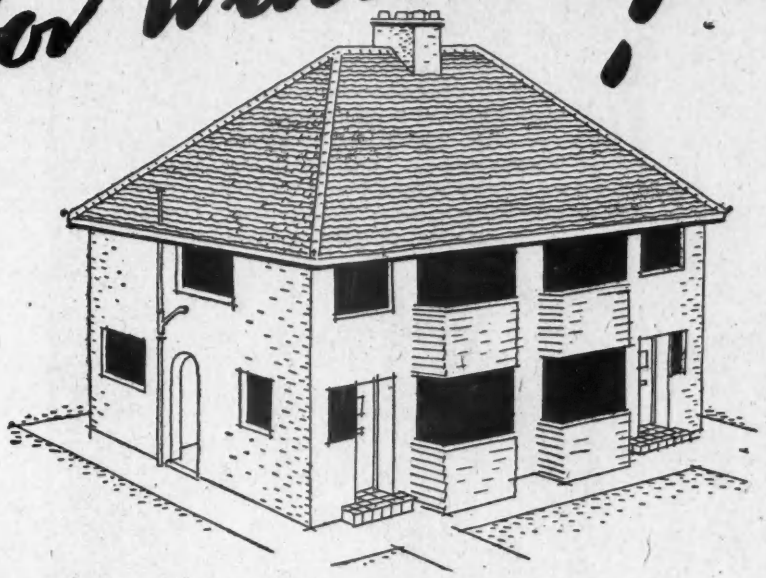

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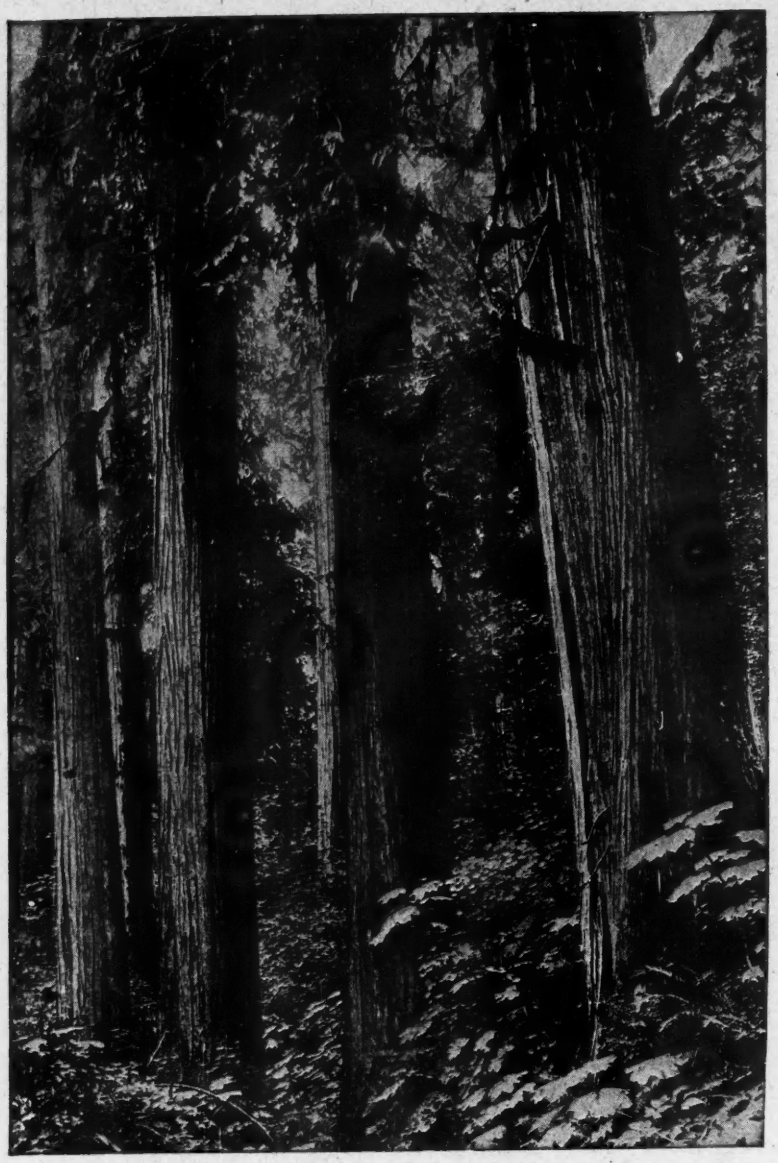

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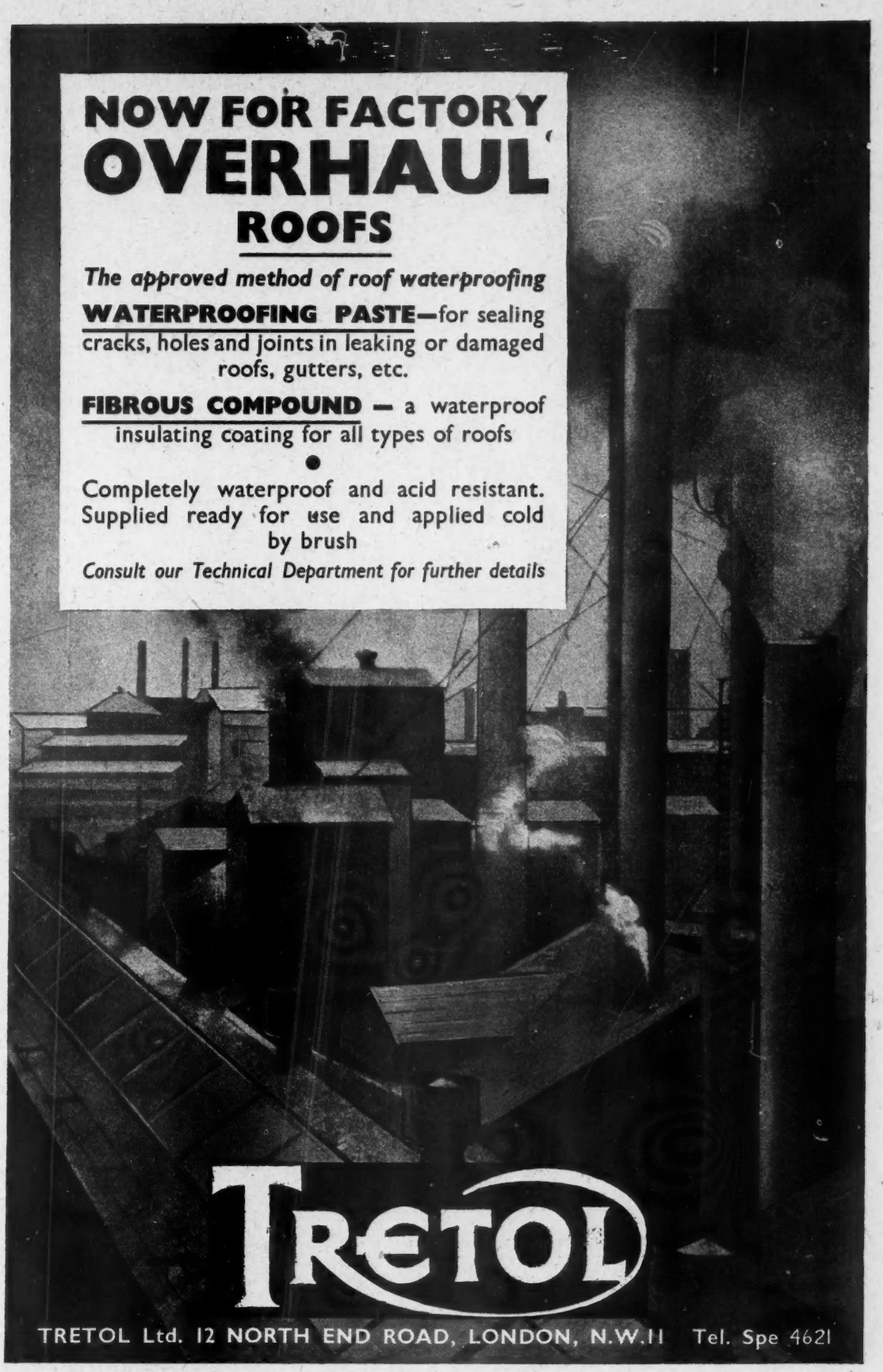
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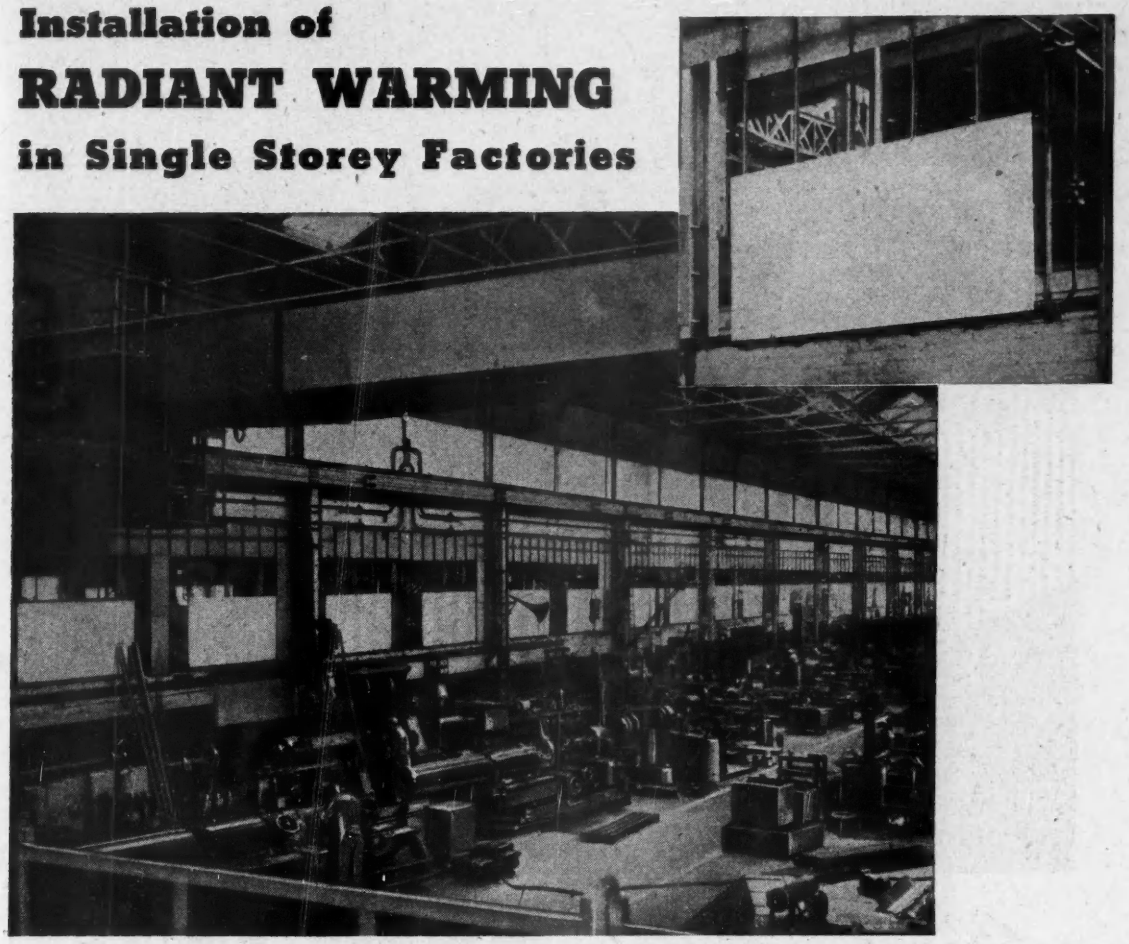

In shed type buildings with a roof of light construction the installation of RADIANT WARMING by the normal method of pipe coils embedded in the ceiling is obviously impracticable, but the advantages of RADIANT WARMING are very conveniently and economically obtained in such circumstances by the use of SUNZWAY Patent Radiant Units.

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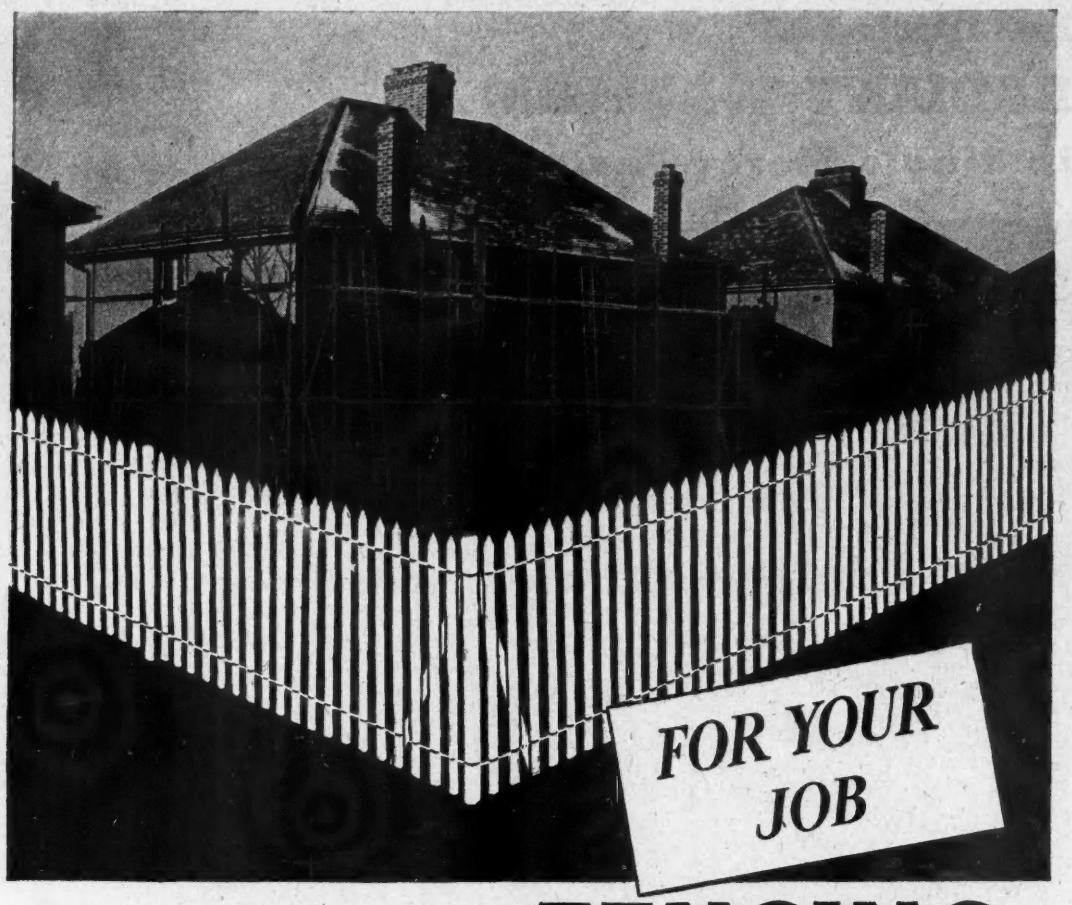

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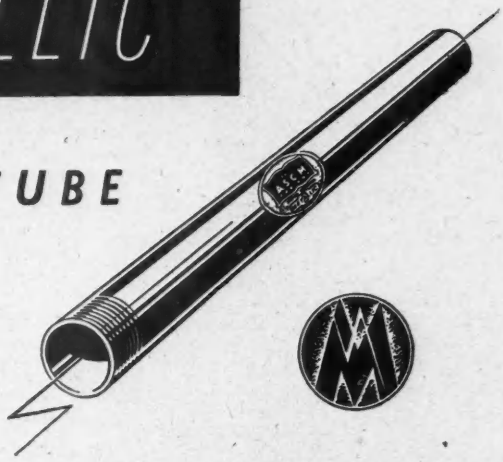

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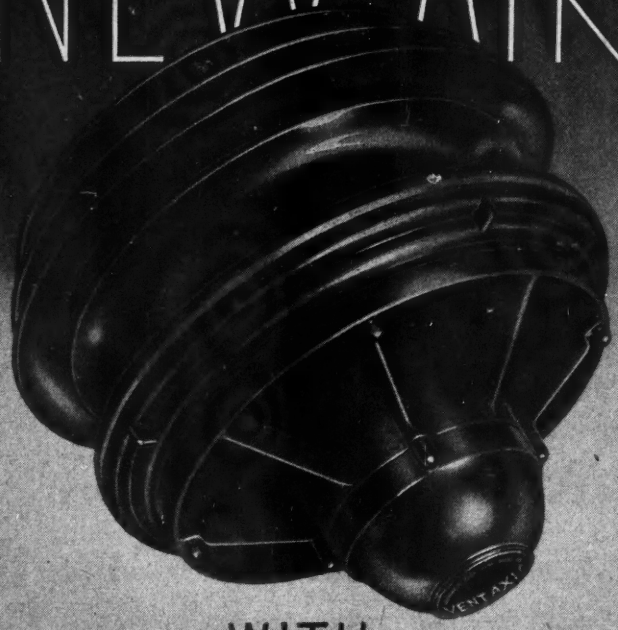

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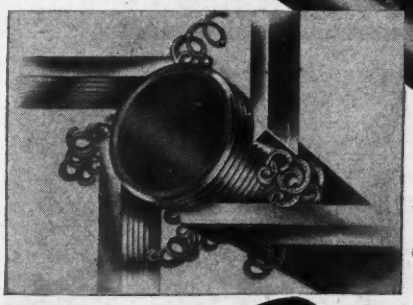

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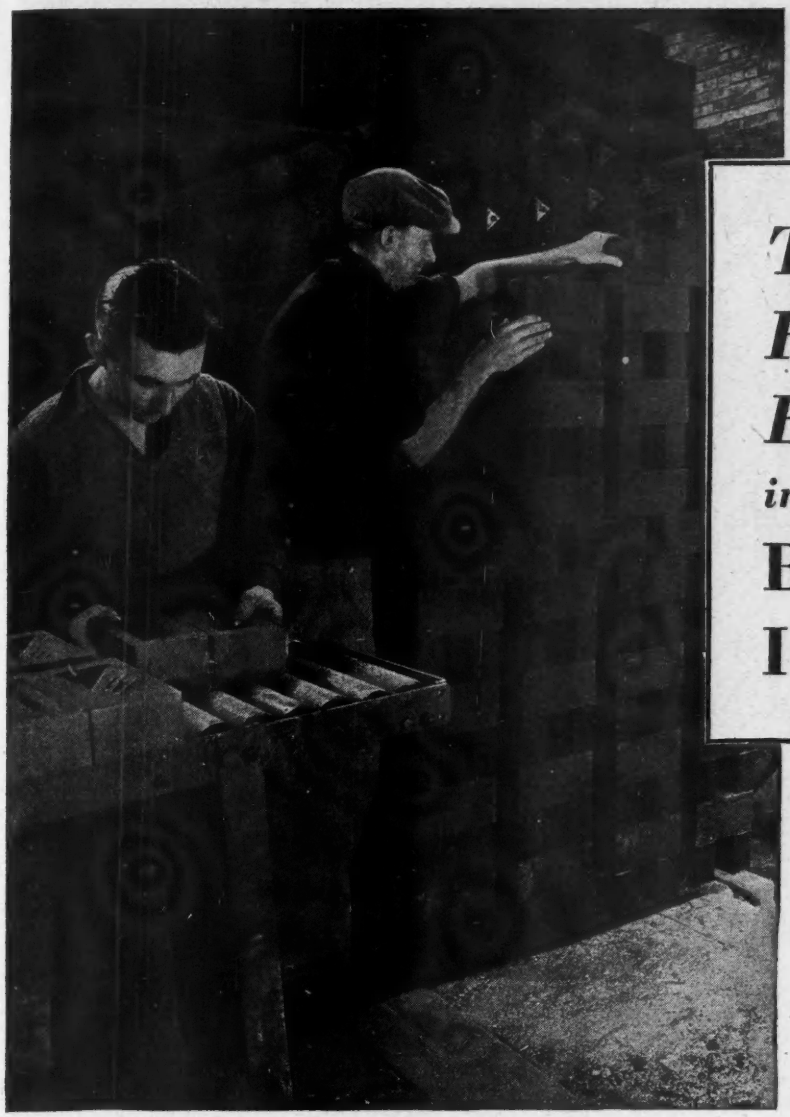

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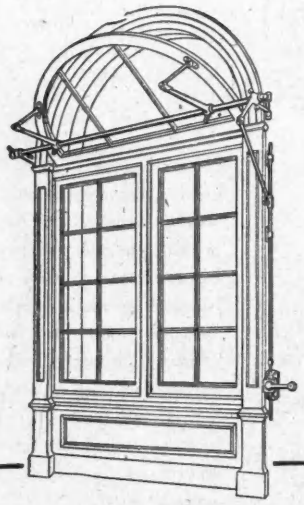

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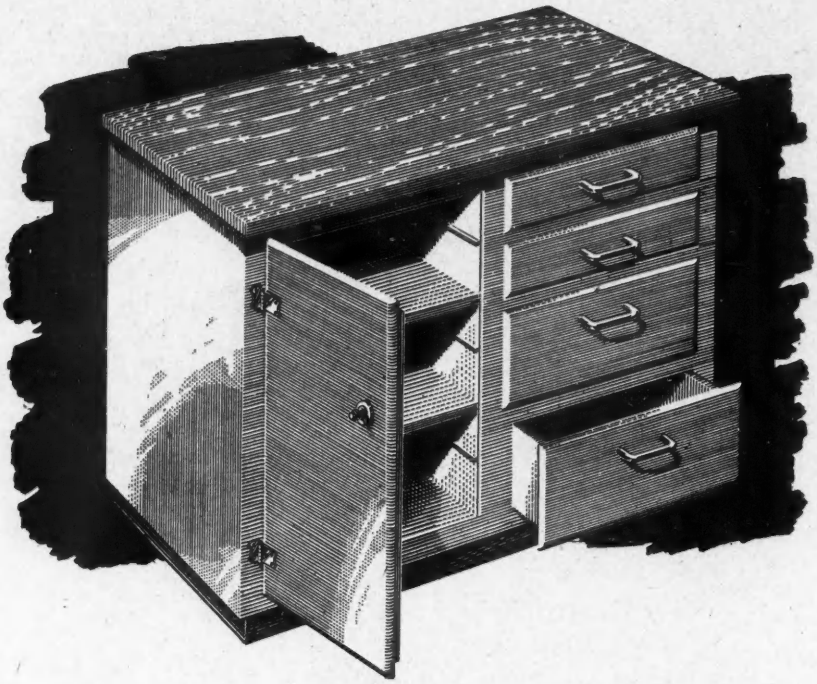
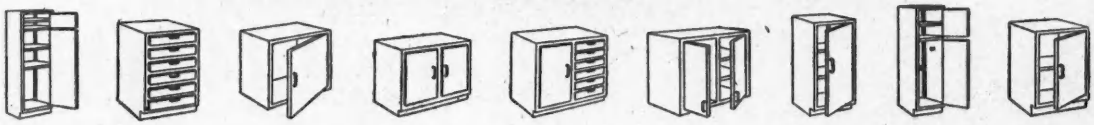
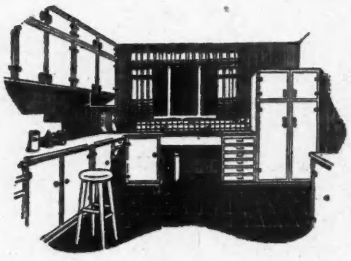
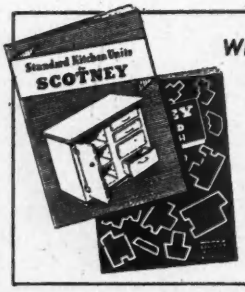


Standard Kitchen Units



THE range of Units caters for the flatlet or mansion—the new building or the conversion. Clean, flat surfaces and a Unit for every need . . . roomy store cupboards with adjustable, interchangeable shelves . . . broom cupboards with hooks and clips for every cleaning utensil and drawers by the score. They are delivered with all fittings, smooth machine-finished and ready for speedy fixing on Site. Accurate machining and careful seasoning ensure that doors and drawers will never need easing. Designs are based on the British Standards Specification and are approved by the Ministry of Health. And we can give good delivery against necessary timber licenses . . .





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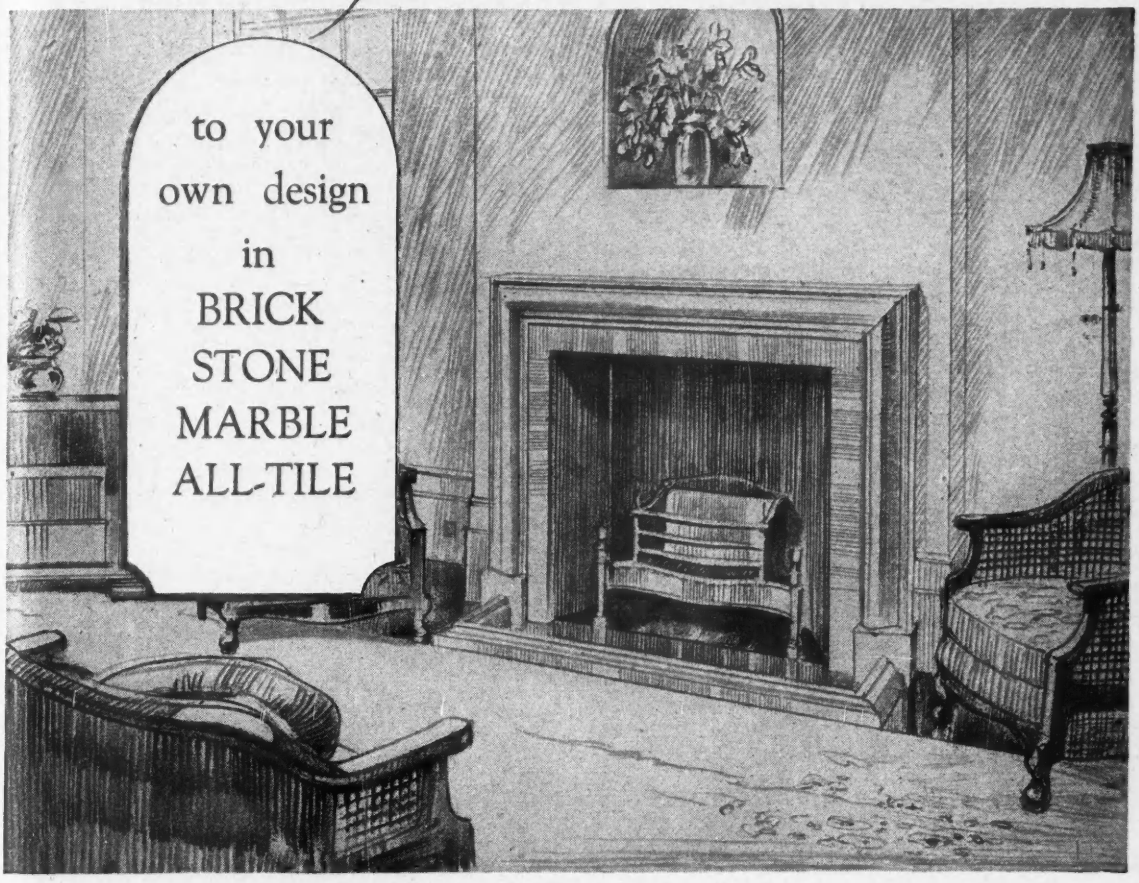

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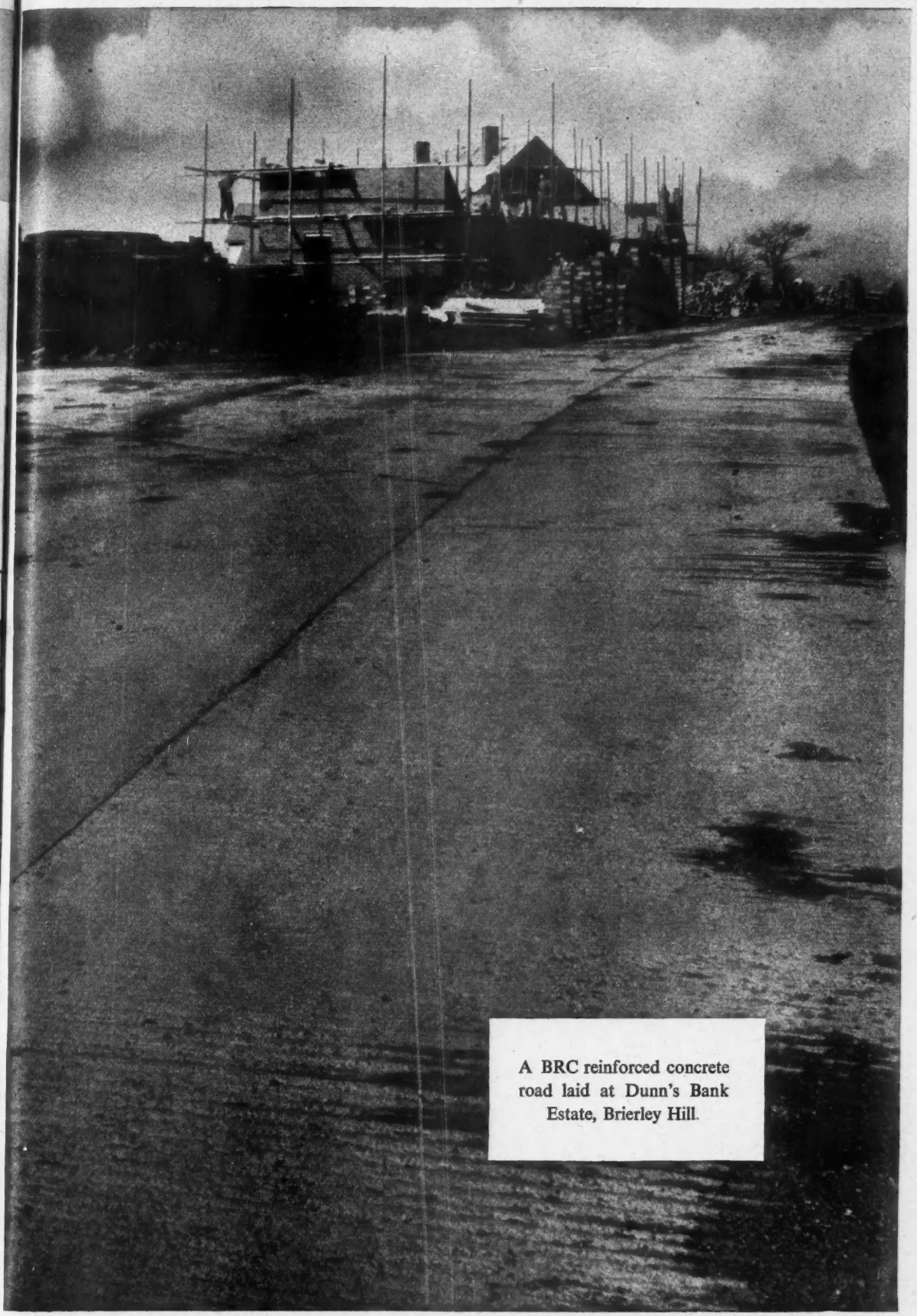
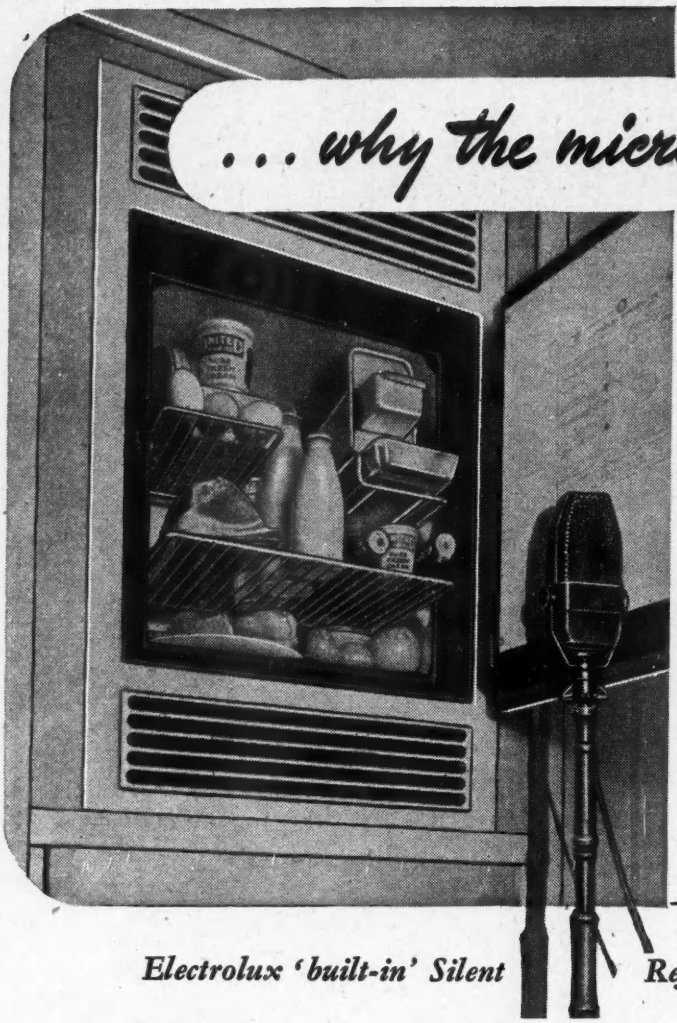


A BRC reinforced concrete road laid at Dunn's Bank Estate, Brierley Hill.

M.W.472



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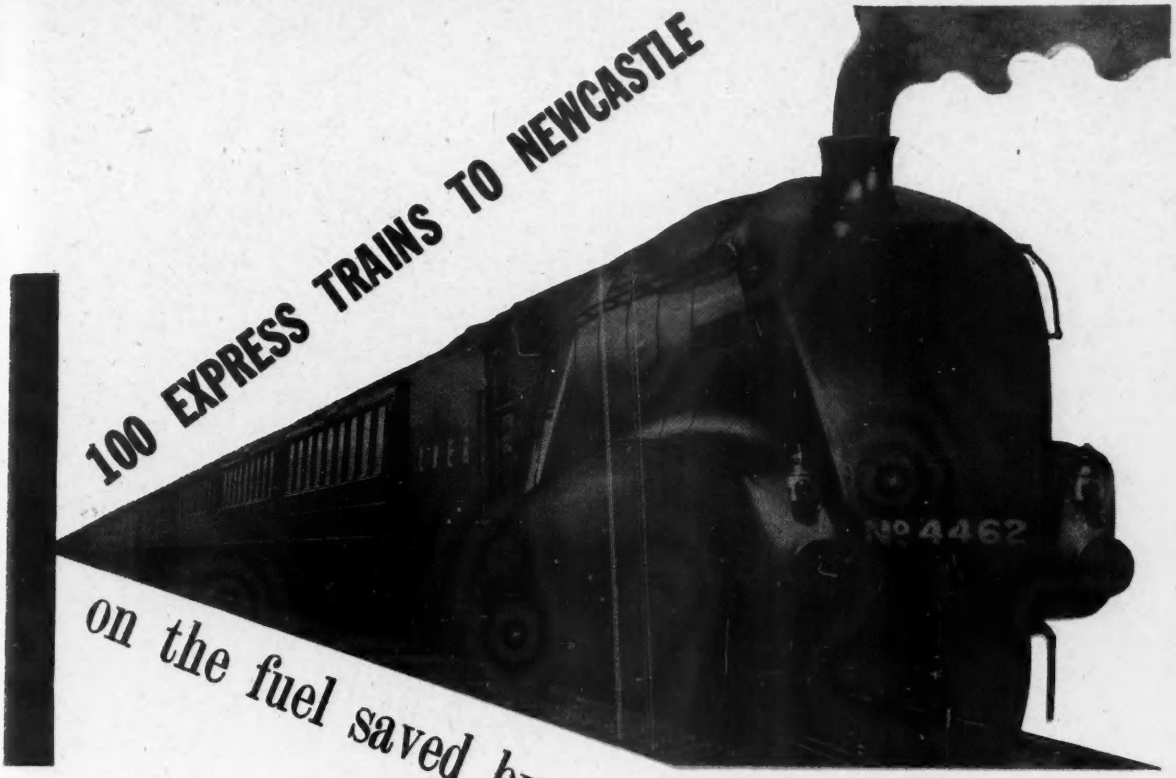

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Corrugated Iron	–	22G	–	22G	–	–	22G	22G
Celotex Insulating Board	–	–	–	–	1/2"	1"	1/2"	1"
Air Space/Purlins	–	–	4"	4"	–	–	–	–
Celotex Insulating Board	–	–	1/2"	1/2"	–	–	–	–
Thermal Transmittance 'U'	1.40	1.50	0.31	0.32	0.35	0.23	0.36	0.24
To make good heat loss per 1000 sq. ft. — Fuel Consumption tons p.a.	7.7	8.3	1.7	1.8	1.9	1.3	2.0	1.3
To make good heat loss per 1000 sq. ft. — Cost of Heating Plant. Cost £'s	88	94	19	20	22	14	22.5	15
Saving in Plant and Fuel due to Celotex Insulation %			78	79	75	84	76	84

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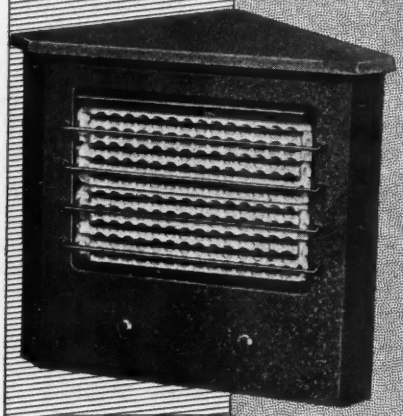
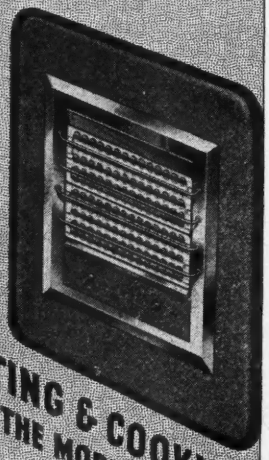


Above:
The Corner Fireplace
Although present production is largely absorbed by urgent Government orders for Housing requirements, all enquiries will receive our keen and enthusiastic co-operation.
Right: Wall Panel Fire



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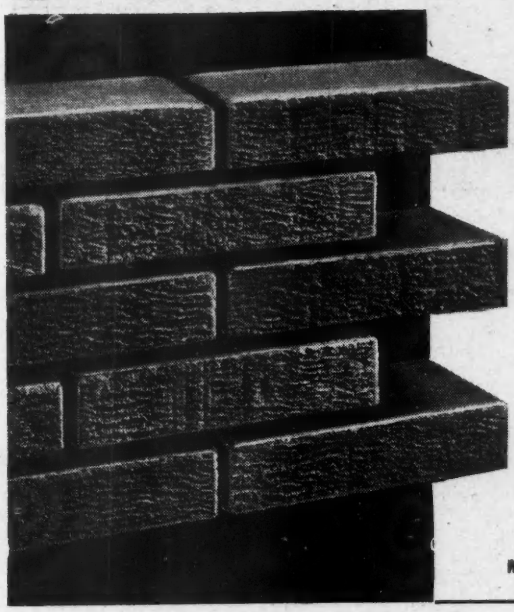

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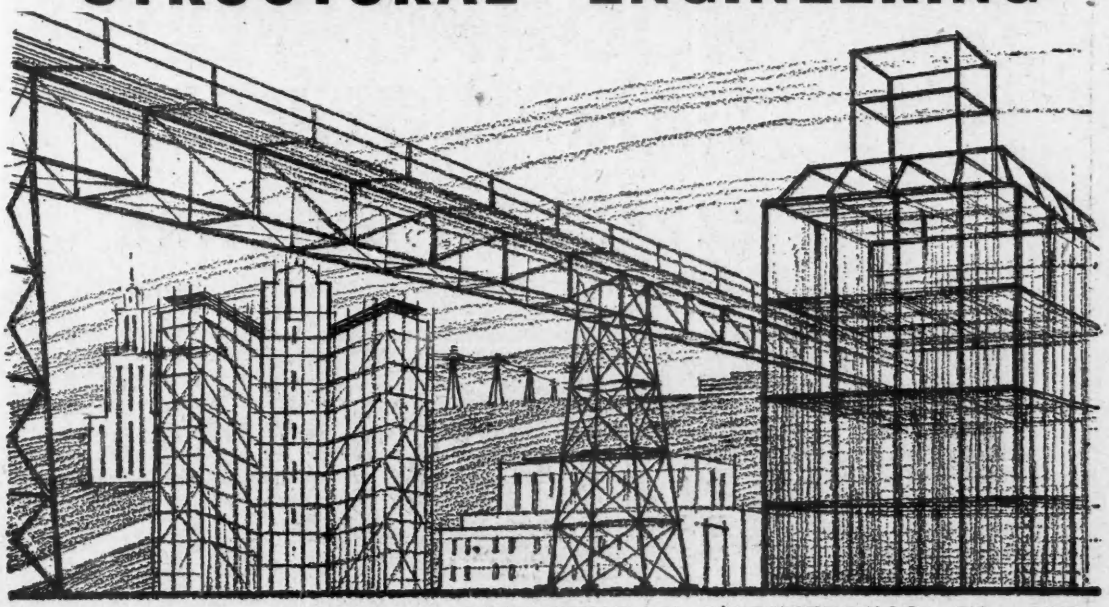

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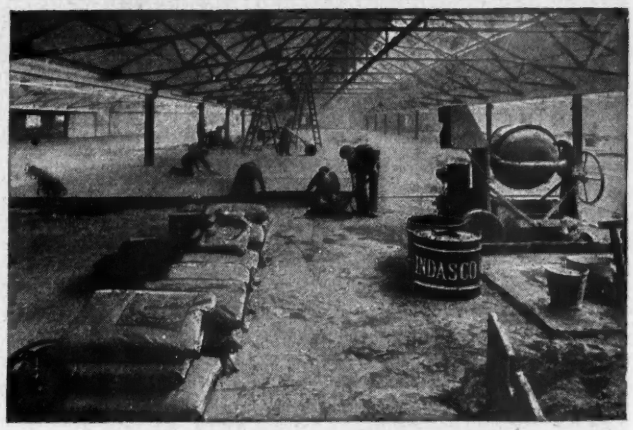

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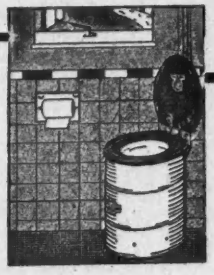

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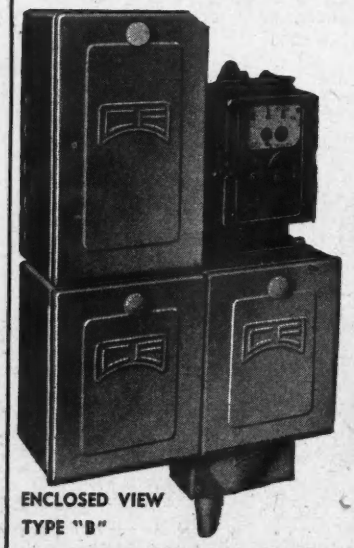

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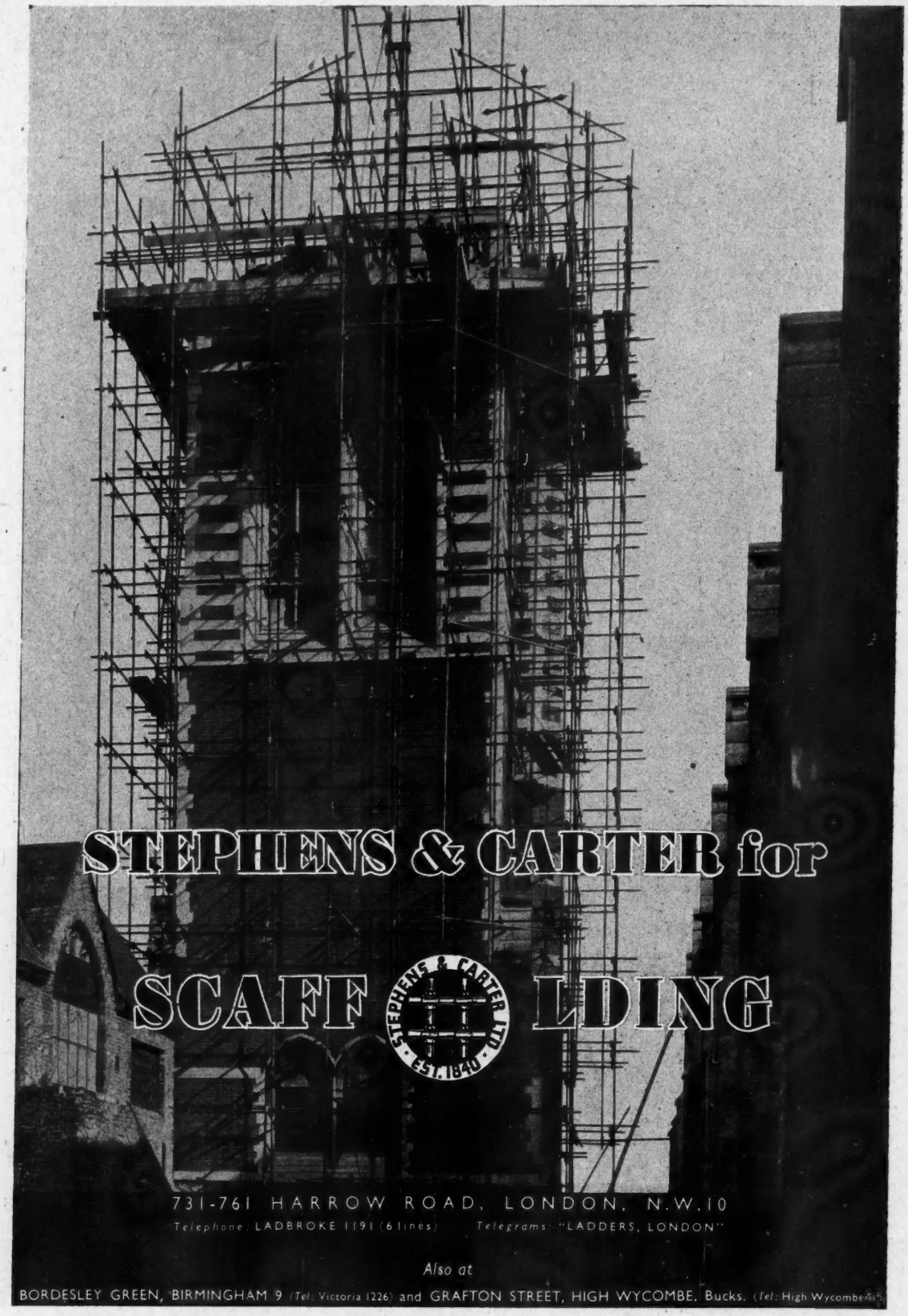
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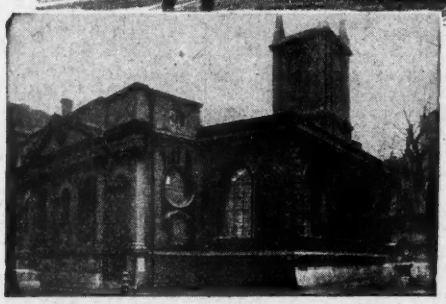

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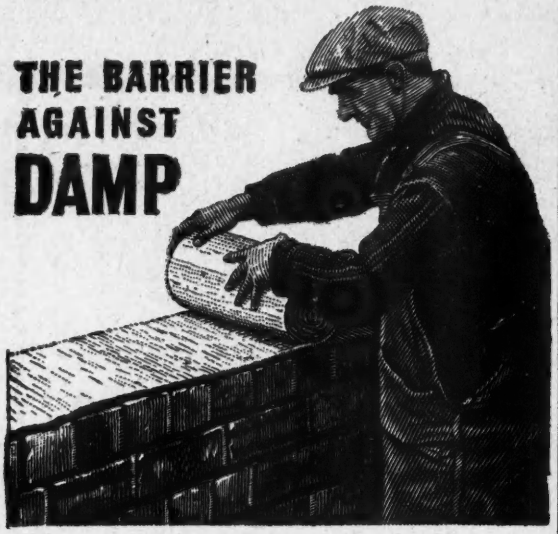

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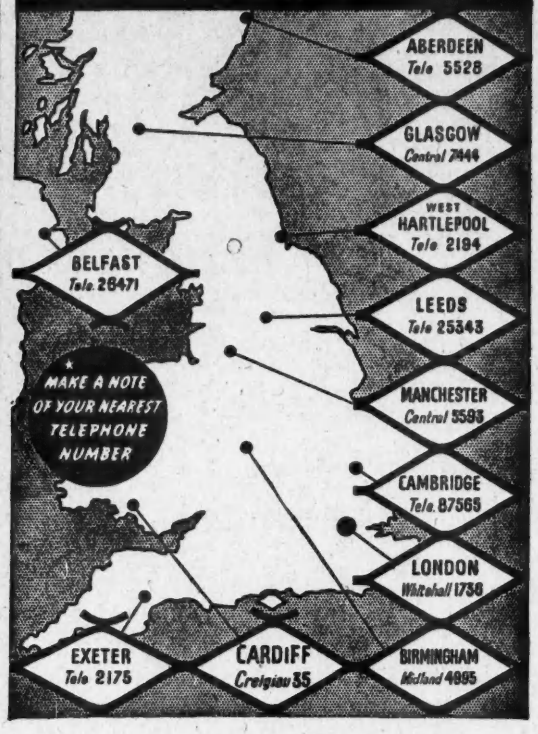

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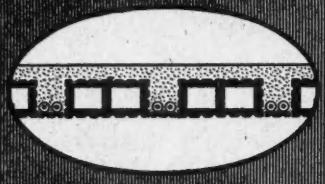

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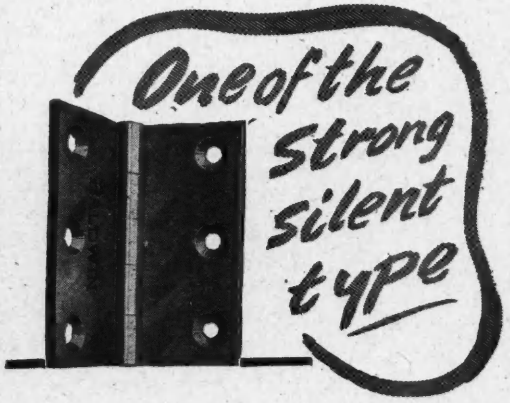

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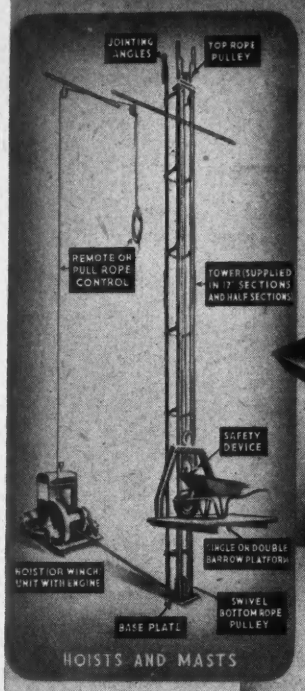

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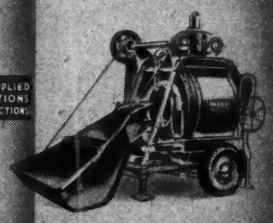
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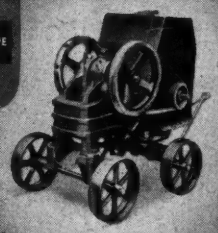
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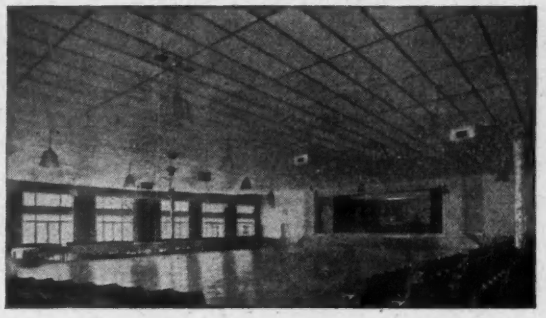

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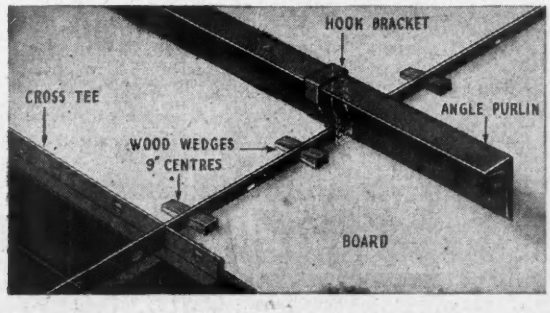

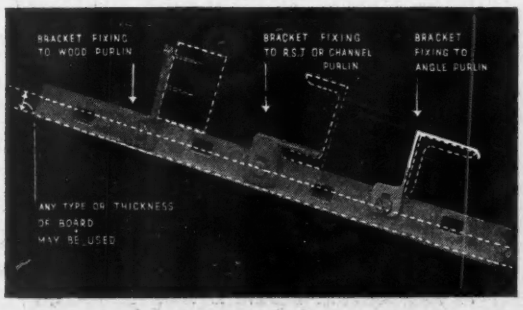

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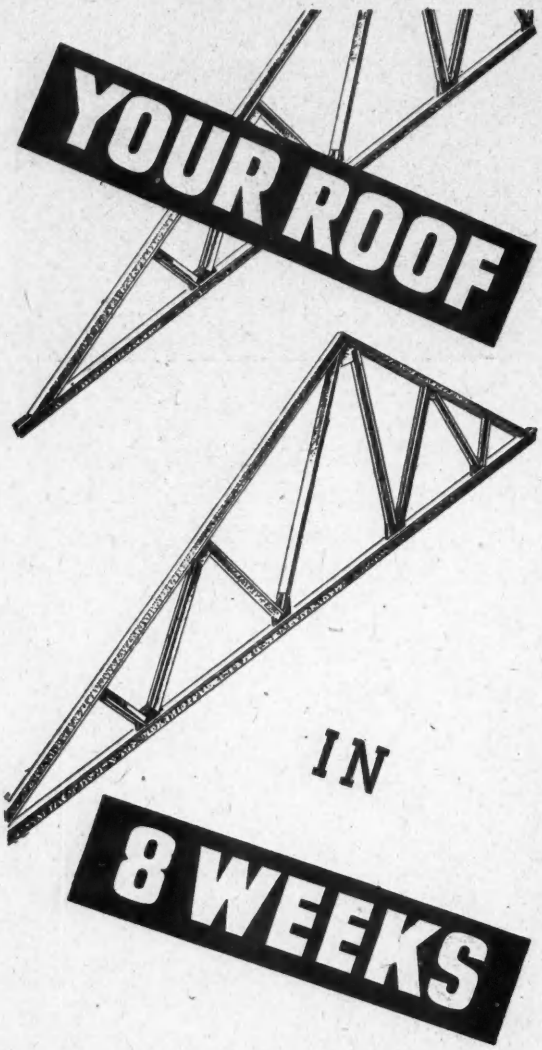

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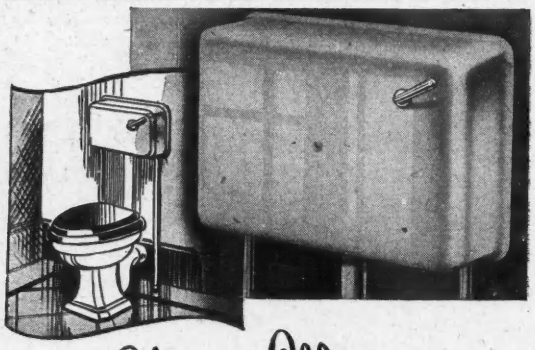

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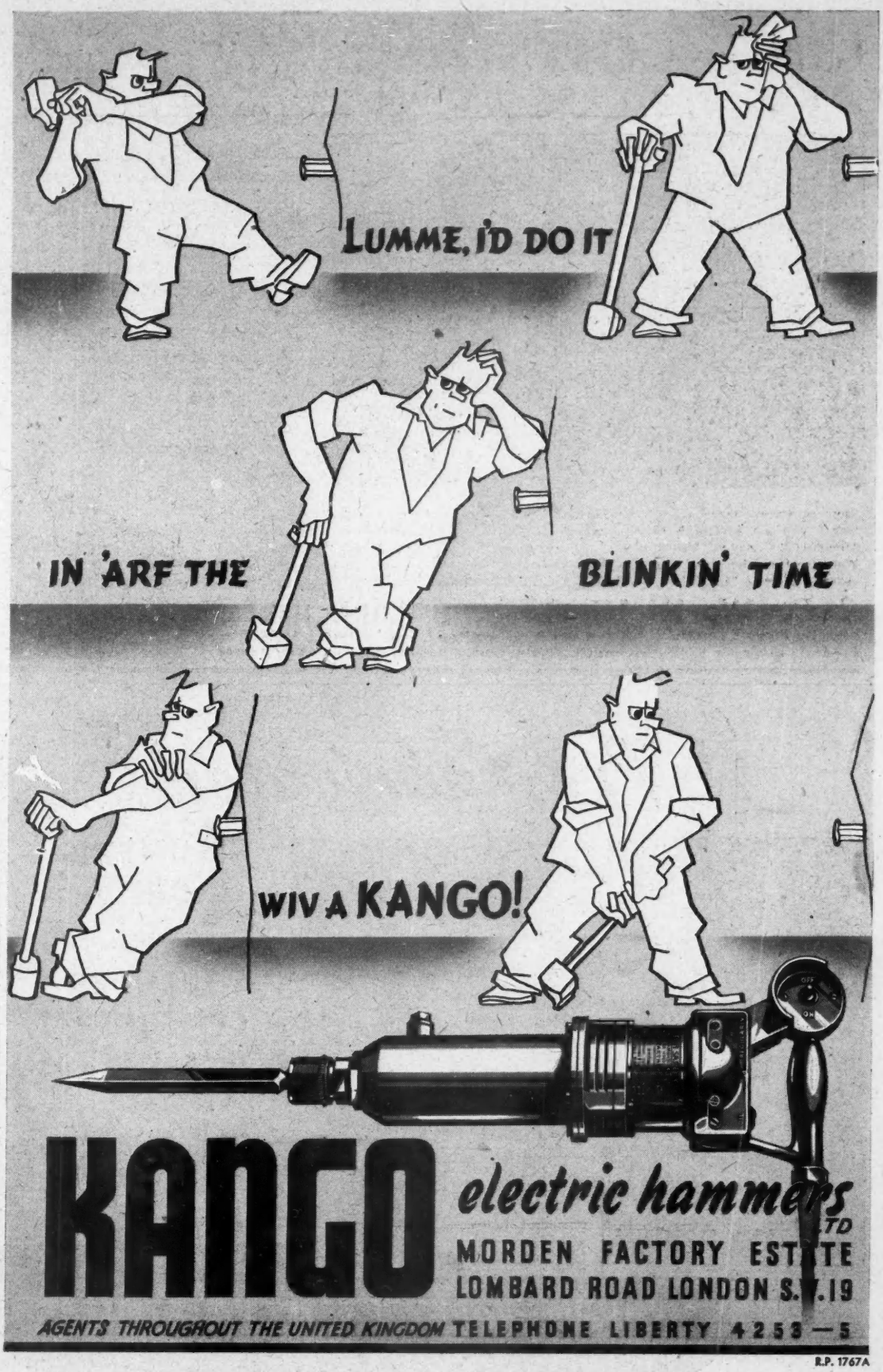
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WIV A KANGO!
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KING COWSTALLS AND WATER BOWLS

STAND No. M303 ROYAL SHOW LINCOLN JULY 1st-4th

EXHIBITS INCLUDE: Full size sectional example of modern utility Cowhouse, with various types of King Yoke and Chain Tying Stalls, Automatic Drinking Bowls, Tubular Steel Pen Panelling, King Sliding Door Gear, etc. King Precast Concrete Greenhouse, for nurserymen and market gardeners. "Innes" Patent Safety Feed Chaffcutter. "Innes" Sacklifters, Models No. 1 and 3. King Hand-operated "Rope-lock" Hoist, and King Electric Chain Pulley Blocks, Major and Minor Models. King "Supertrack" for manure, feed, and general purpose runways.

Photograph above shows a Cowhouse constructed and erected by King. Completely equipped with King Cowstalls and Water Bowls, it is typical of many such buildings erected or equipped by King throughout the country. Photograph on right is of a King Camlock Water Bowl. King Cowstalls and Water Bowls are the best obtainable, and the demand for them is very great. Order now for prompt delivery. Write for Farm Building Booklet BD 46, Cowstall Booklet CS 47, or Water Bowl Booklet WB 46.

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Binder Canvases • Pneumatic Grain Conveying & Storage Equipment

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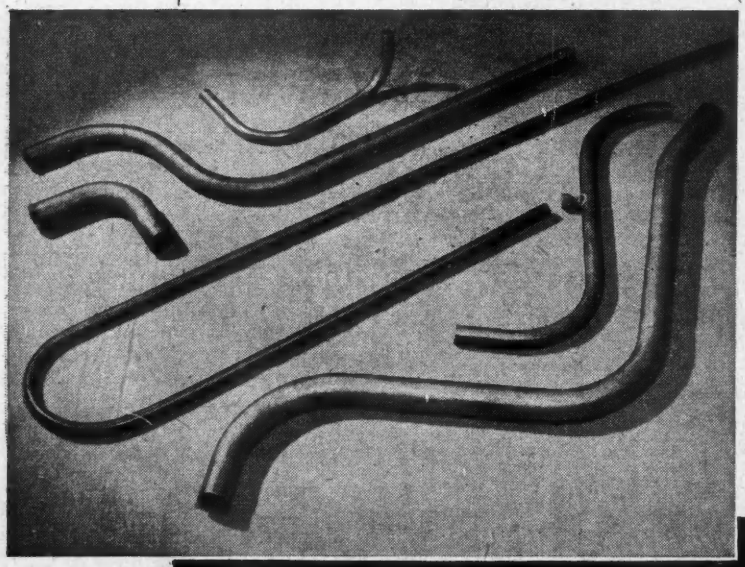

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In all metals

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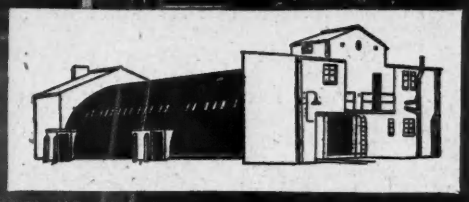
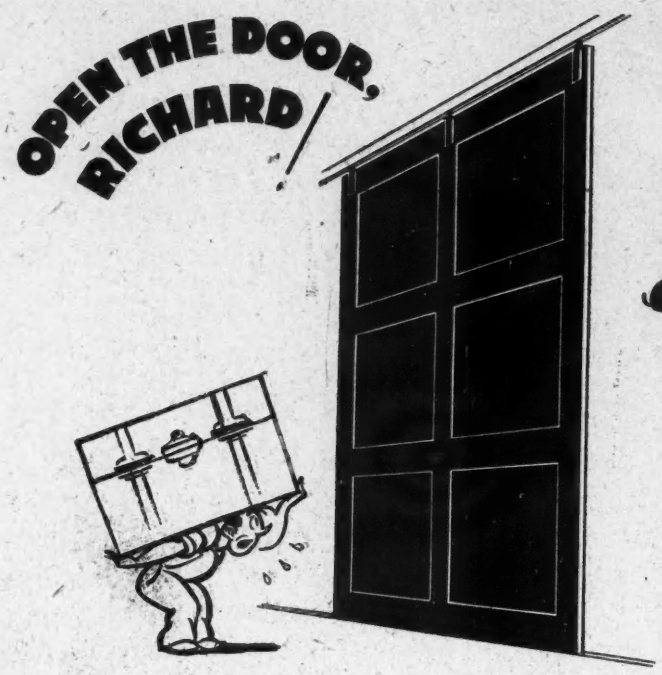
A CONVERSION by KENT & SUSSEX CONTRACTORS LTD



An example of construction and conversion of a normal type Services hut, carried out under Government contract by

KENT & SUSSEX CONTRACTORS LTD.

CARLTON ROAD, ERITH, KENT **Telephone: Erith 3000**



It will open easily, because

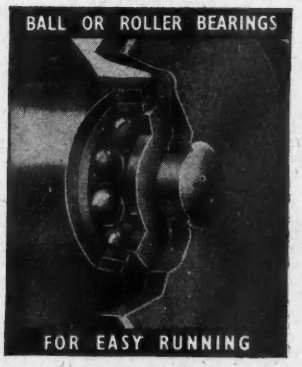
it is fitted with King Sliding Door Gear. At a touch of the hand a King Sliding Door glides aside, swiftly, silently and smoothly, like mercury upon glass, or water upon the petal of a lily. Poetical words, but they have a very practical meaning: Always specify King Sliding Door Gear for trouble-free ease of operation, neat appearance and long life.

KING SLIDING DOOR GEAR

For a gliding example of perfect smooth running consider a door which is fitted with King Sliding Door Gear. Years of careful study and experience have helped to place King Door Gear in the foremost position. No other make possesses all the valuable features which are incorporated in the King Product.

Stockists throughout the country have King Door Gear ready for immediate delivery.

WRITE FOR ILLUSTRATED BOOKLET AND PRICE LIST.

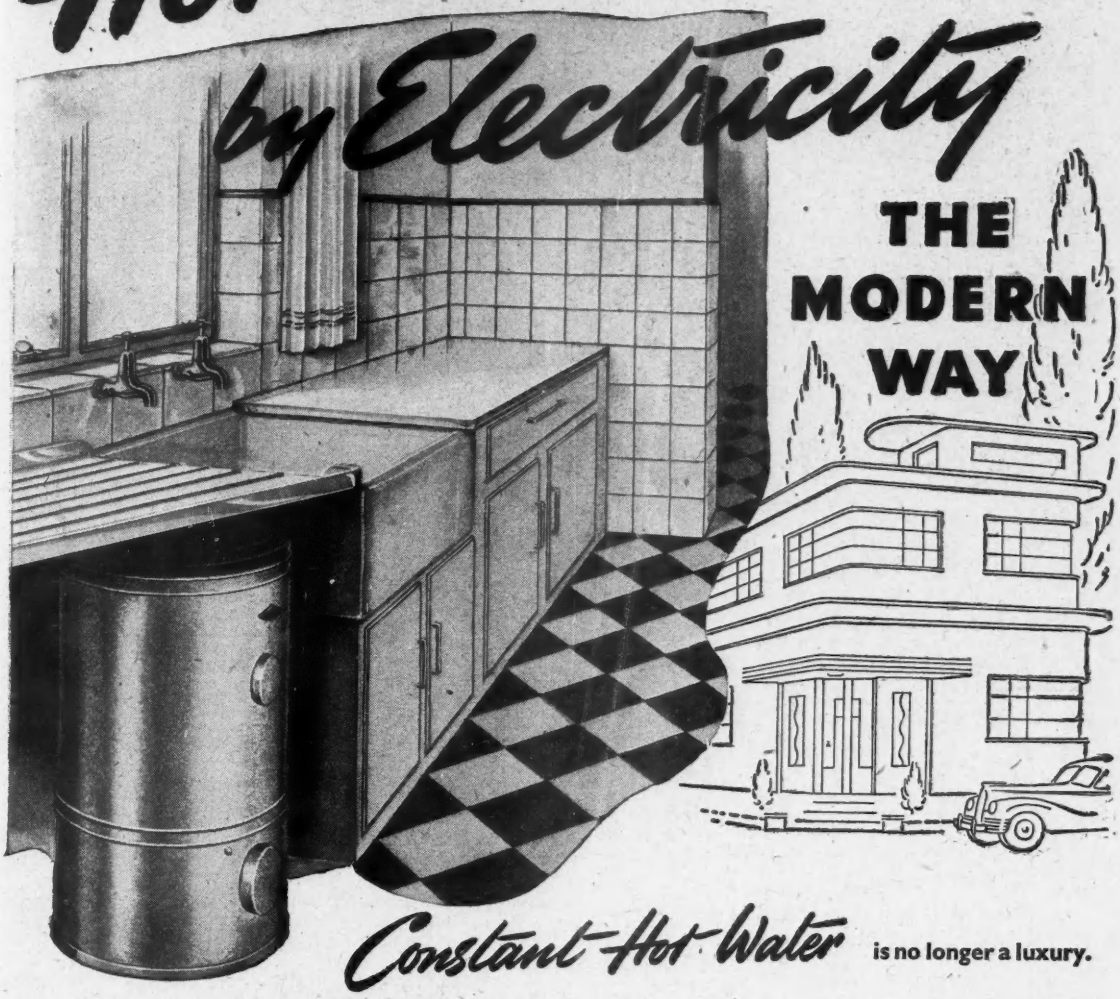


Other features of King Door Gear include: King-Alloy Rolled Steel Section; Domed Top sheds all moisture; Correct Trolley Clearance; Anti-rust finish; Flat treads for long life; Lateral movement for easy running; Tecalemit Pressure Lubrication.

GEO. W. KING LTD., D.G.A. WORKS, HITCHIN, HERTS.

PHONE: HITCHIN 960 (10 LINES)

Hot water by Electricity



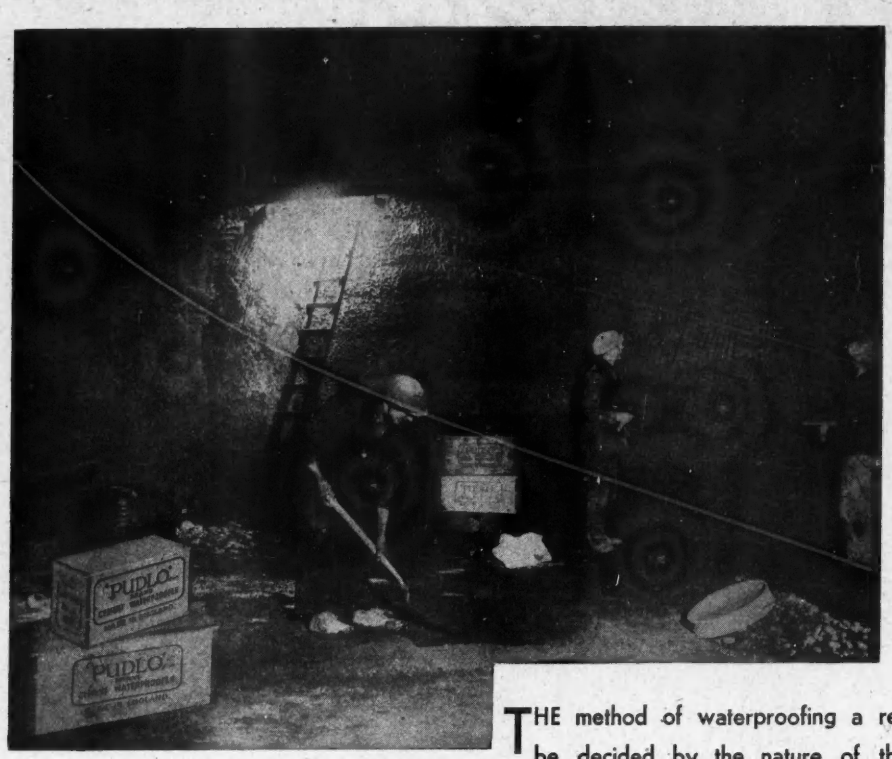
Constant Hot Water is no longer a luxury.

No modern home is complete without a continuous supply of hot water, which must be available at all hours, both summer and winter alike. Architects and Builders are recommended to investigate the advantages of installing the Sadia U.D.B. water heater. This compact factory built unit will stand under the draining board in the kitchen, and requires no flues or structural alterations of any kind. On-site work is limited to the installation of hot water piping and wiring one electric point. Under present conditions, when every penny counts, no-one interested in modern building can afford to be without details of the U.D.B. Sadia. Write now to:—

AIDAS ELECTRIC LTD., Sadia Works,
Rowdell Road, Northolt, Middlesex.
Manufacturers of Sadia Electric Water Heaters.
Scottish Agents:
W. Brown & Co. (Engineers) Ltd., 89, Douglas Street, Glasgow, C.2.

SADIA TYPE U.D.B
AUTOMATIC ELECTRIC WATER HEATER

RESERVOIRS FOR THE COCKERMOUTH R.D.C.



WATERPROOFING THE RESERVOIR AT TALLENTIRE

Engineer & Surveyor:
ALWYN E. SIMPSON, Assoc.M.Inst.C.E., M.Inst.M.&Cy.E., Assoc.M.Inst.W.E.

Contractors:
Messrs. Wm. MULCASTER & CO. (Contrs.) LTD. CREWE.

THE method of waterproofing a reservoir must often be decided by the nature of the aggregate most easily obtainable in its locality. Reinforced concrete, comparatively thin in section, and formed with non-porous, small and well-graded aggregate, is economically waterproofed by the inclusion of 'PUDLO' Brand waterproofing powder throughout its thickness, but where circumstances dictate the use of a coarse, poorly graded, or porous aggregate reliance is placed upon internal renderings of sand and cement similarly waterproofed. The reservoir here illustrated is one of two built in 1935 at Tallentire and Bothel respectively. The constructional concrete was not waterproofed, and the judgment of the Engineer in relying upon an internal rendering made impervious by the addition of 'PUDLO' Brand waterproofer, has been completely justified by the satisfactory results that have been evident ever since.

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P.S. *I can deliver* NOW.—
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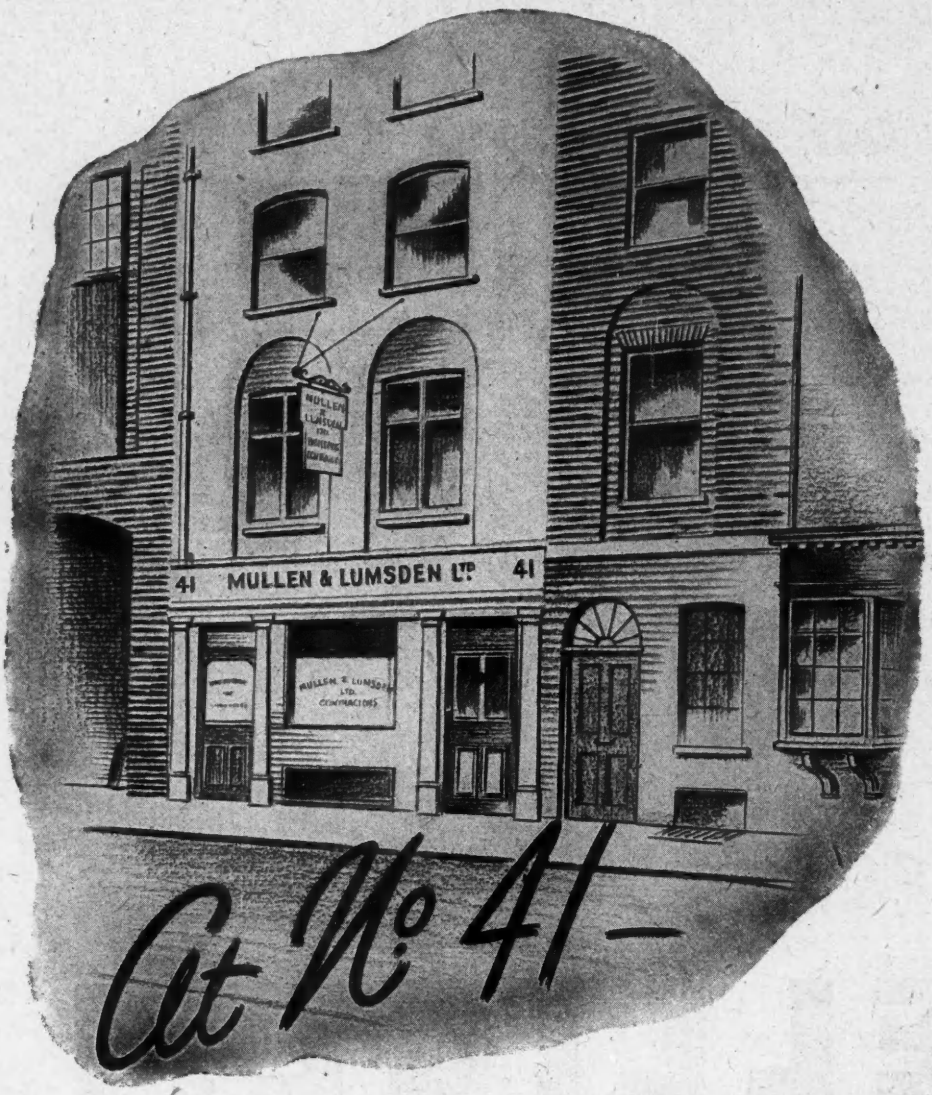

—the home of all that is best in modern building practice.
The accumulated experience of over 60 years' service is at your command.

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ILFORD 1963

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BRIGHTON:
16, UPPER LEWES ROAD
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SMALL WORKS DEPT.:
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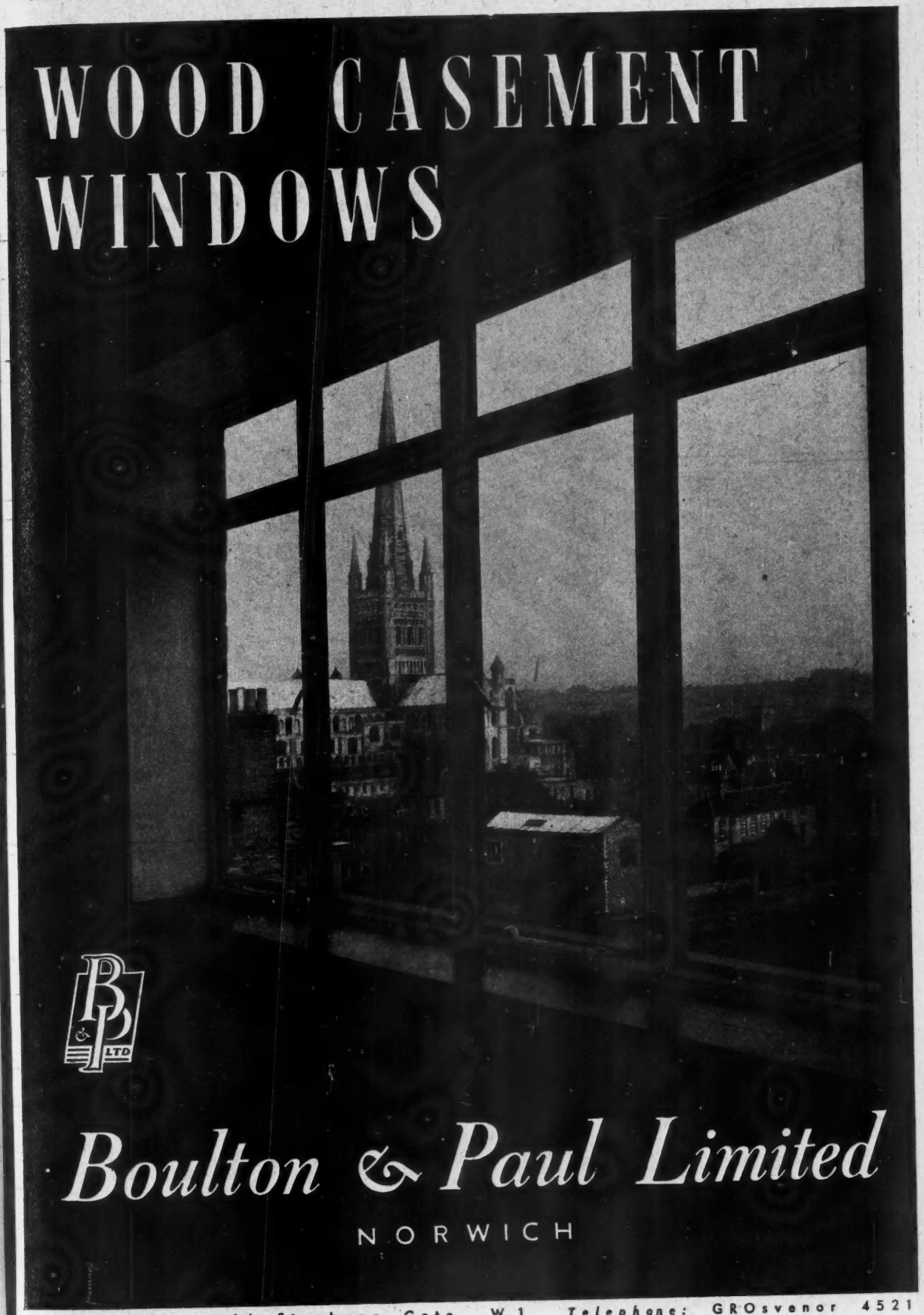
MUSEUM 3705

WOOD CASEMENT WINDOWS



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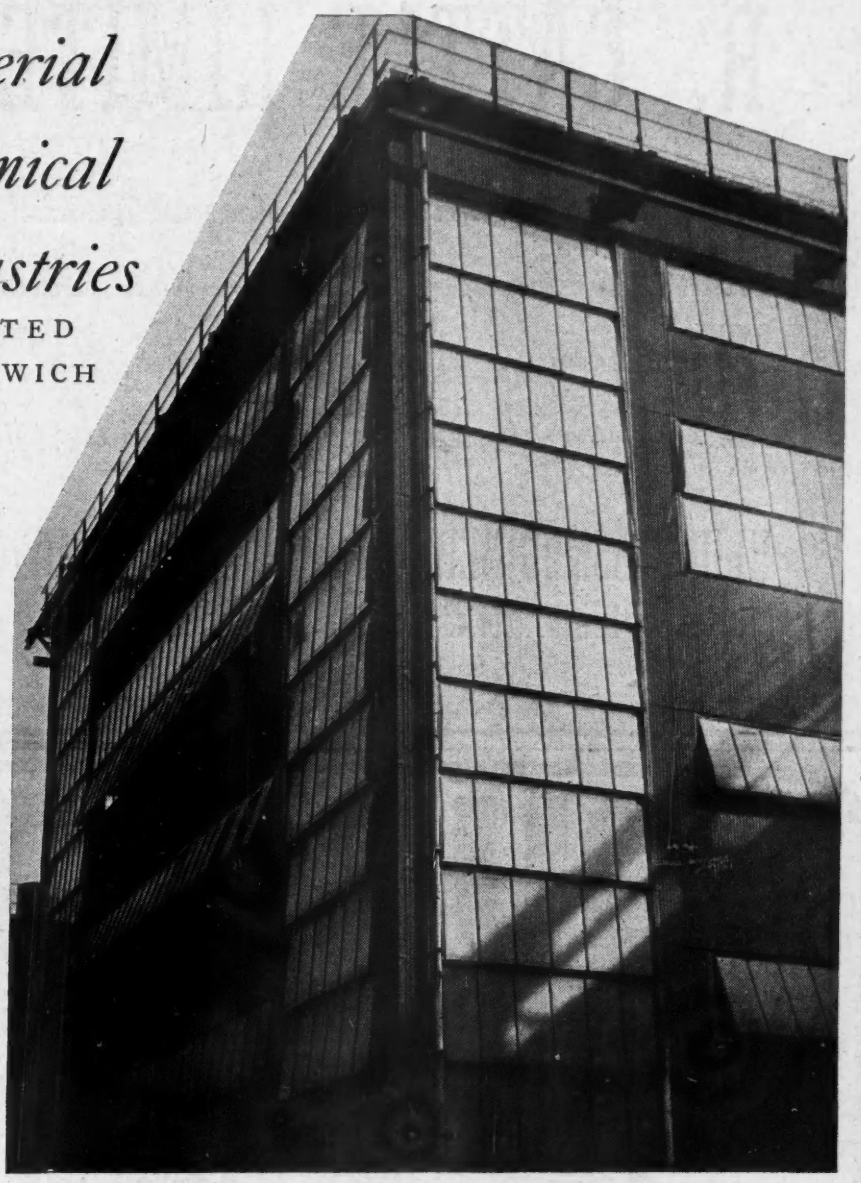

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HOPE'S VERTICAL GLAZING

WITH GEAR OPERATED OPENING LIGHTS

HENRY HOPE & SONS LIMITED
Smethwick, Birmingham 17 Berners St., London, W.1

R. CATTLE LIMITED

look forward to renewing the pleasant associations with their many Friends in the Building Industry and can assure them that the same Personal Service will be gladly given.

HIGH-CLASS JOINERY AND PRECISION WOODWORK

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Telephone: ELGAR 5411 (4 lines).

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LIQUID ASPHALTIC PROOFING

FOR ROOFS

Applied cold, by unskilled labour, gives a perfect seal against the weather.

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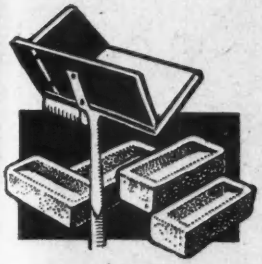
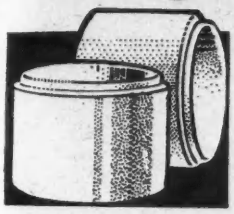
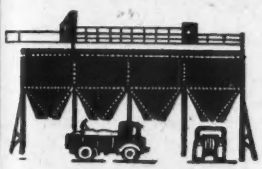
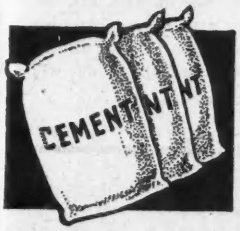


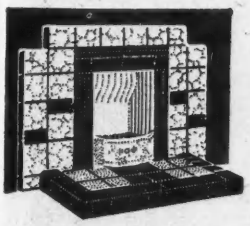
Eastwoods Sales Ltd.

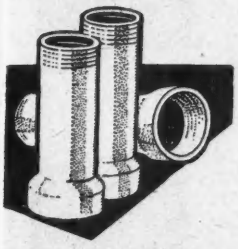






OF COURSE, WE CAN'T ILLUSTRATE EVERYTHING WE HANDLE — WHICH IS PRACTICALLY EVERY COMMODITY FOR THE BUILDER, CIVIL ENGINEERING CONTRACTOR AND THE DECORATOR— THE PUBLISHER WOULDN'T LET US HAVE THE SPACE EVEN IF WE COULD AFFORD TO PAY FOR IT! BUT FOR ALL THESE MUCH NEEDED MATERIALS OR ANYTHING ELSE REQUIRED BY THE BUILDING TRADE . . . . .

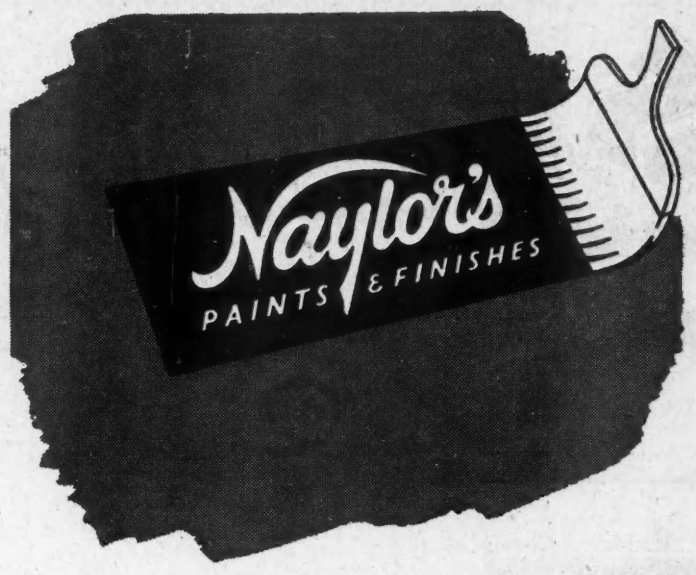




Ring Waterloo 6900

EASTWOODS SALES LTD., 47, BELVEDERE ROAD, LONDON, S.E.1

WHAT QUALITY MEANS



During the 150 years we've been making paint at Naylor's, we've always insisted that the Paints and Finishes we sold should be of the very finest quality. Only the best ingredients and the highest standard of manufacture have satisfied us. They have satisfied you too—and that is why Naylor's is known throughout the British Isles as "Quality Paint."

Because of the shortage of good raw material and skilled labour, and because we have insisted on maintaining our reputation for quality, Naylor's Paints are scarce. We have dealt with orders in strict rotation, but we have had to disappoint many of our friends. In particular the tremendous demand for Naylor's Powder Distemper and Melanoid Stove Enamel has put us a long way behind in deliveries.

We are hoping that the shortage of raw material and the days of scarcity will soon be over, and we are planning to reintroduce other Naylor's Finishes in the near future. Rest assured that when they are available, they will maintain Naylor's reputation for quality.

THE RAWLPLUG PAINT CO., CROMWELL ROAD, LONDON, S.W.7. N48

Craftsmen in STAINLESS STEEL
BRONZE AND ALL LIGHT ALLOYS

- DRAWN MOULDINGS
- FASCIA LETTERS
- DOOR FURNITURE
- BALUSTRADES
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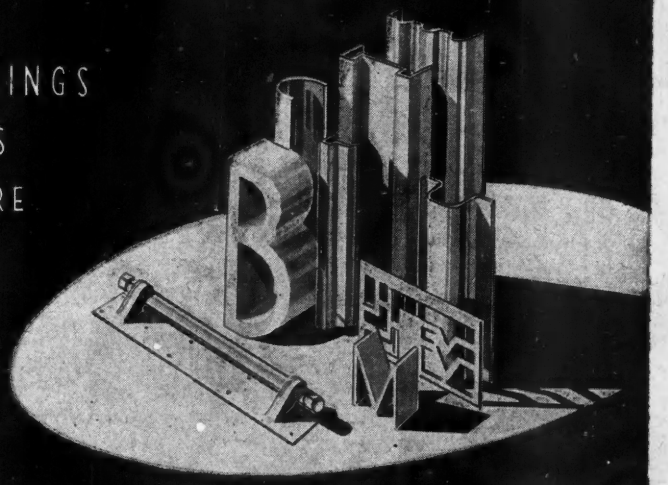

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BRENT METAL WORKS

The Brent Metal Works Ltd., North Circular Road, London, N.W.2. GLA. 6262

ALUMINEX

ROOF AND SIDEWALL GLAZING

WILL STILL BE MODERN IN 100 YEARS TIME

Photograph shows Standard Lantern Light type SL1210 at the Cunliffe-Owen Aircraft Ltd.'s factory.

Contractors: Sir Robert McAlpine & Sons (London) Ltd.

SOLE PATENTEES THROUGHOUT THE WORLD

WILLIAMS & WILLIAMS LTD.

RELIANCE WORKS, CHESTER

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BRITISH ROPES LTD *for all kinds of* WIRE ROPE

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125, COMMERCIAL ROAD,
NEWPORT, MON.
175, NORTHCOTE ROAD,
LONDON, S.W.11.
AND LIVERPOOL

RADIATION LIMITED

proprietors and its Subsidiary Companies registered users of the registered Trade Mark

REGULO

publish this Order of the High Court of Justice dated 25th March 1947

In the High Court of Justice Chancery Division (Group B)

MR. JUSTICE ROMER

Between RADIATION LIMITED *Plaintiffs and*
LILLIE (LEEDS) LIMITED *Defendants*

THIS COURT DOTH ORDER that the Defendants their directors servants and agents be restrained from infringing the Plaintiffs' registered trade marks No. 430203 No. 583515 and No. 603255 or any of them and from advertising offering for sale selling or supplying any cooking or heating apparatus or parts thereof or accessories therefor not of the Plaintiffs' manufacture or merchandise under or by reference to the mark "Regulo" or "Regelo" or under or by reference to any other mark so nearly resembling the Plaintiffs' trade mark "Regulo" as to be likely to deceive or confuse members of the trade or public and lead to the said cooking or heating apparatus or parts thereof being passed off as and for the Plaintiffs' goods

AND IT IS ORDERED that the Defendants do deliver up to the Plaintiffs upon oath all advertisements show cards and other material the use of which would be a breach of this order

AND IT IS ORDERED that the Defendants do pay to the Plaintiffs the sum of Ten pounds by way of damages for the infringement by the Defendants of the Plaintiffs said trade marks

AND IT IS ORDERED that the Defendants do pay to the Plaintiffs their costs of this action to be taxed by the Taxing Master

---

RADIATION LTD., RADIATION HOUSE, ASTON, BIRMINGHAM, 6
AND 7 STRATFORD PLACE, LONDON, W.1

Incorporating

ARDEN HILL & CO. LTD., RICHMONDS GAS STOVE CO. LTD.,
DAVIS GAS STOVE CO. LTD., WILSONS & MATHIESONS LTD.,
FLETCHER RUSSELL & CO. LTD., JOHN WRIGHT & CO. LTD.,
RADIATION (LARGE COOKING EQUIPMENT) LTD.

BIGGER *and* BETTER

The huge EUCLID 15-TONS capacity REAR DUMP wagon handles larger loads ***faster.*** Its enormous capacity dwarfs ordinary truck loads—and bigger loads mean fewer hauls!

There's massive strength built into every ounce of the EUCLID—from cab-top to axles, every component is built for 'active service' conditions for OPENCAST COAL PRODUCTION and in the quarry.

SPECIFICATION

ENGINE: Cummins 6-cylinder diesel.
GEARBOX: Five forward speeds and reverse.
CLUTCH: Heavy duty type with large friction area.
REAR AXLE: Fully-floating, double-reduction type.
BRAKES: Powerful Bendix-Westinghouse air brakes.
BODY: Heavy gauge steel with three-ply base—steel, oak and steel.
TIPPING GEAR: Powerful three-stage, double-acting hydraulic ram. Controlled by a four-way valve mounted in cab.

HEIGHT: Overall height 10' 3".
LENGTH: Overall length 23' 0".
WIDTH: Overall width 9' 0".
WHEEL BASE: 13' ½".
TURNING CIRCLE: 64'.
BODY CAPACITY: 9.7 cubic yards.
LOADING CAPACITY: 15-tons.
LOADING HEIGHT: 7' 9".

DELIVERY: Approx. 4 months from receipt of order.

Write to-day for further details of Euclid rear and bottom-dump wagons to:—

JOHN BLACKWOOD HODGE & Co. Ltd.

WORKS AND SERVICE: HUNSBURY, NORTHAMPTON. TELEPHONE: NORTHAMPTON 5262
SALES: 11, BERKELEY STREET, LONDON, W.1. TELEPHONE: MAYFAIR 9514

CONTRACTS

CITY OF SALFORD.

TENDERS are invited for the ERECTION at HOPE HOSPITAL, ECCLES OLD-ROAD, SALFORD, 6, of ONE PREFABRICATED CONCRETE HUT, 39 ft. 6 in. long, 19 ft. 7 in. wide, and 9 ft. high at eaves, with a short connecting passage to an existing concrete hut, together with the necessary finishings and site works.

Specification may be obtained from, and Plan and General Conditions for Work inspected at, the City Engineer's Office, Town Hall, Salford, 3, on payment of £1 1s., which will be returned on receipt of a bona-fide Tender.

Tenders must be enclosed in sealed envelopes endorsed "Storage Accommodation—Hope Hospital," and be forwarded so as to be received by the undersigned not later than 3rd JULY, 1947.

H. H. TOMSON,
Town Clerk.

BOROUGH OF HORNSEY.

HOUSING SCHEME NO. 8.

ERECTION OF 45 HOUSES, SPRINGFIELD-AVENUE, N.10.

The COUNCIL invite applications from CONTRACTORS who may wish to submit TENDERS for the ERECTION of the above 45 HOUSES.

Bills of Quantities, Forms of Tender, etc., can be obtained from Mr. J. H. Melville Richards, Borough Engineer and Surveyor, Town Hall, Crouch End, N.8.

Drawings may be examined at the office of the Borough Engineer and Surveyor, or the Architect, Charles M. Swannell, Esq., 6, Raymond-buildings, Gray's Inn, W.C.1.

Tenders must be on the prescribed form and delivered or sent by post (sealed and endorsed) so as to be received by the undermentioned not later than 10 a.m. on MONDAY, the 14th JULY, 1947.

The Council reserve the right to decline all or any of the Tenders received.

H. BEDALE,
Town Clerk.

Town Hall,
Crouch End, N.8.
13th June, 1947.

DAVENTRY RURAL DISTRICT COUNCIL.

WOODFORD-CUM-MEMBRIS HOUSING SITE—ROADS.

The above COUNCIL invite TENDERS for the CONSTRUCTION of ROADS, SEWERS and WATER MAINS at WOODFORD.

Plans, Specifications and Details may be obtained from the Council's Architects, Messrs. Sir John Brown, A. E. Henson & Partners, 30, Billing-road, Northampton, on or after Wednesday, 18th June, 1947.

Tenders, in a plain sealed envelope marked "Woodford Roads, Sewers and Water Mains," addressed to the undersigned and bearing no other distinguishing mark, are to be received not later than the first post on 2nd JULY, 1947.

The successful contractor will be required to provide an approved bond for the due performance of the Contract either from a Bank or an Insurance Company.

The Council do not bind themselves to accept the lowest or any Tender.

G. B. SAINT,
Clerk to the Council.

44, High-street,
Daventry.
10th June, 1947.

BEAMINSTER RURAL DISTRICT COUNCIL.

PERMANENT HOUSING AT NORTH BOWOOD SITE, NETHERBURY.

PRELIMINARY NOTICE.

BUILDING CONTRACTORS who wish to TENDER for TWO HOUSES of PERMANENT CONSTRUCTION at the above HOUSING SITE are requested to apply to the undersigned, sending a deposit cheque for £2 2s., made payable to the Council.

Bills of Quantities and Plans will shortly be sent to Contractors making application for them. The date of submission of Tenders will be notified at the same time.

Deposits will be refunded upon receipt of a bona-fide Tender and the return of the plans supplied. Applications should be made by 8th JULY, 1947.

The Contractor may be required to give satisfactory security for the due fulfilment of his contract. The Council do not bind themselves to accept the lowest or any Tender.

ROBT. LEIGH,
Clerk of the Council.

Beaminster, Dorset.
12th June, 1947.

TOWCESTER RURAL DISTRICT COUNCIL.

ERECTION OF AIREY RURAL HOUSES.

TENDERS are invited for the ERECTION of 60 AIREY RURAL HOUSES within the district in the following parishes:—

COSGROVE	4
GRAFTON REGIS (ALDERTON)	4
LITCHBOROUGH	2
PAULERSPURY	6
TOWCESTER	34
WHITTLEBURY	6
WOODEND	4

Builders and Contractors may tender for all 60 Houses or for any individual site or sites.

Specification, Plans and Bills of Quantities can be obtained on payment of a deposit of £3 3s., which is returnable upon receipt of a bona-fide Tender. Site plans for the seven sites can be inspected at the Council's Offices.

Tenders, in plain sealed envelopes, endorsed "Airey Rural Houses," must be received by the undersigned not later than 10 a.m. on SATURDAY, 12th JULY, 1947.

The Council do not bind themselves to accept the lowest or any Tender.

JOHN S. BUDGE,
Clerk of the Council.

Town Hall,
Towcester,
Northants,
21st June, 1947.

SAFFRON WALDEN RURAL DISTRICT COUNCIL.

PARISHES OF LITTLE CHESTERFORD AND ELMDON.

TENDERS are invited for the ERECTION of HOUSES in the following parishes:—

Parish	No. of Houses
LITTLE CHESTERFORD	4
ELMDON	4

Specifications and Bills of Quantities may be obtained from the undersigned on payment of a deposit of £3 3s. for each set of Specifications and Bills of Quantities supplied, which sum will be refunded on receipt of a bona-fide Tender, not subsequently withdrawn and the return of all documents.

Tenders, in sealed envelopes, endorsed "Tender—Four Houses, Little Chesterford/Elmdon," must reach the undersigned not later than 12 noon on MONDAY, 21st JULY, 1947.

The Council does not undertake to accept the lowest or any Tender.

A. W. OVERALL,
Clerk of the Council.

Council Offices,
Debden-road,
Saffron Walden, Essex.
24th June, 1947.

DURHAM COUNTY STANDING JOINT COMMITTEE.

ERECTION OF EIGHT POLICE HOUSES AND OFFICE, HARROWGATE HILL, DARLINGTON.

TO BUILDERS.

TENDERS are invited for the work in connection with the above.

Plans and General Conditions of Contract can be seen at the County Architect's Office, Court-lane, Durham, where Bills of Quantities and Forms of Tender can be obtained on applying to the undersigned.

No Tender will be considered unless enclosed and sealed in the endorsed envelope supplied, addressed to the Clerk of the County Council, Shire Hall, Durham, and delivered not later than first post, SATURDAY, 12th JULY, 1947.

No pledge is given to accept the lowest or any Tender.

G. R. CLAYTON, F.R.I.B.A.,
County Architect.

County Architect's Office,
Court-lane,
Durham,
20th June, 1947.

SALOP COUNTY COUNCIL.

NEW HALL, CENTRAL KITCHEN, WELLINGTON.

TENDERS are invited from Building Contractors for carrying out ALTERATIONS to the NEW HALL CENTRAL KITCHEN, WELLINGTON.

Applications for bills of quantities should be sent me as soon as possible, accompanied by a crossed cheque for Two Guineas, made payable to the Salop County Council, the amount of which will be refunded upon receipt of a bone-fide Tender.

Tenders, sealed in endorsed envelopes (which will be supplied and which must not bear any name or mark indicating the sender), must be received by the Secretary for Education, County Buildings, Shrewsbury, not later than 10 a.m. on FRIDAY, 18th JULY, 1947.

The Council do not bind themselves to accept the lowest or any Tender, and the successful contractor will be required to enter into a bond for the due completion of the contract.

A. G. CHANT,
County Architect.

5, Belmont,
Shrewsbury.
June, 1947.

BOROUGH OF CHESTERFIELD.

EXTENSION TO THE MARKHAM MUNICIPAL HOSTEL.

TENDERS are invited for the PROPOSED EXTENSION to the MARKHAM MUNICIPAL HOSTEL, HIPPER-STREET, CHESTERFIELD, together with General Repair Work to the existing Buildings, in accordance with the Plans, Specification and Bills of Quantities prepared by Mr. W. A. Derbyshire, Architect, Gluman Gate, Chesterfield.

Copies of the General Conditions of Contract, Specification and Bills of Quantities can be obtained from Mr. W. S. Wilson, M.I.Mun.E., Borough Engineer and Surveyor, Town Hall, Chesterfield, upon payment of a deposit of Two Guineas, refundable upon the receipt of a bona-fide Tender and the return of all documents, and Plans may be seen at the office of the Architect, Mr. W. A. Derbyshire.

Sealed Tenders, in plain envelopes endorsed "Markham Municipal Hostel Extension," and bearing no indication of the sender, to reach the undersigned not later than 10 a.m. on MONDAY, 14th JULY, 1947.

RICHARD CLEGG,
Town Clerk.

Town Hall,
Chesterfield.
18th June, 1947.

COUNTY BOROUGH OF NORTHAMPTON.

DALLINGTON FIELDS ESTATE.

The COUNCIL propose to ERECT 74 HOUSES of TRADITIONAL CONSTRUCTION in TWO GROUPS, of 40 and 34 HOUSES, respectively. The scheme includes five basic types of houses to be erected in pairs, blocks of four, and blocks of six.

Contractors wishing to tender should forward a cheque for a deposit of Two Guineas, payable to "Northampton Corporation," to the Town Clerk not later than the first post on Monday, 7th July, 1947, the deposit being returnable on receipt of a bona-fide Tender.

Bills of Quantities will be forwarded on the 10th July, and Tenders should be returned by the 24th JULY.

The Council do not bind themselves to accept the lowest or any Tender, or to bear the costs of tendering.

C. E. VIVIAN ROWE,
Town Clerk.

Guildhall, Northampton.
20th June, 1947.

MONMOUTHSHIRE COUNTY COUNCIL.

TENDERS are invited for the ERECTION of NURSES' QUARTERS and MATERNITY BLOCKS at the COUNTY HOSPITAL, PANTEG. The Plans and Conditions of Contract can be inspected and Bills of Quantities obtained at the office of Mr. Colin L. Jones, F.R.I.B.A., County Architect's Department, Queen's Hill, Newport, Mon., on payment of a deposit of £2 2s., which should be remitted by cheque only, made payable to the "Monmouthshire County Council," and it will be returned on receipt of a bona-fide Tender. Contractors will be required to pay their workmen the recognised rates of wages and observe the hours of labour recognised in accordance with the Fair Wages Clause recently approved and adopted by the Council (a copy of which is included in the Form of Contract), and must produce evidence of being insured against liability for accidents to workmen and third parties. The Contractor whose Tender is accepted shall enter into a Bond by a Guarantee Society to be approved by the Council, who will pay the normal premium only therefor direct, and shall execute the model Form of Contract, a copy of which may be seen at my office and of the contents of which the Contractor shall be deemed to have had notice. Sealed and endorsed Tenders are to be in my hands not later than WEDNESDAY, 9th JULY, 1947. No Tender will be considered unless received in the endorsed envelope supplied, and the envelope shall not bear any name or mark indicating the sender. The lowest Tender will not necessarily be accepted.

VERNON LAWRENCE,
Clerk of the Monmouthshire County Council.

County Hall,
Newport, Mon.

THE RURAL DISTRICT COUNCIL OF HATFIELD.

PERMANENT HOUSES

The above-named COUNCIL invite TENDERS for the ERECTION of 23 PERMANENT BRICK HOUSES and EXTERNAL WORKS at ESSENDON, near HATFIELD, HERTS.

Copies of the Bill of Quantities may be obtained from the undersigned upon payment of a deposit of £2 2s., which will be refunded on receipt of a bona-fide Tender and the return of the above documents. The Plans and Conditions of Contract will be available for inspection at these Offices.

The Form of Tender, in a sealed envelope endorsed "Essendon Housing Scheme," and the priced Bill of Quantities in another envelope similarly endorsed, with the name of the Contractor marked thereon, must be delivered to the undersigned by not later than 12 o'clock on the 19th JULY, 1947.

The Council do not bind themselves to accept the lowest or any Tender.

EDGAR F. CULL,
Clerk of the Council.

Council Offices,
16, St. Albans-road,
Hatfield, Herts.
19th June, 1947.

DORSET COUNTY COUNCIL.

SELECTED CONTRACTORS.

A list of Contractors is now being prepared for the Council's Building and Maintenance Works. Contractors and Manufacturers are therefore invited to make application for consideration in respect of one or more of the following classes of work or materials:—

1. General Building.
2. Maintenance and Repairs.
3. Central Heating and Domestic Hot-Water Installations.
4. Electrical Installations.
5. Structural Steel.
6. Reinforced Concrete.
7. Masonry (Natural and Artificial).
8. Ironmongery.
9. Sanitary Fittings.
10. Roof Tiling and Slating.
11. Joinery.
12. Asphalt, etc., Waterproofings.
13. Floor Finishings (all types).
14. Patent Roof Coverings.
15. Metal Windows.
16. Plumbing Installations.
17. Decorations.
18. Tarmacadam and other Pavings.
19. Refrigeration and Cold Storage.
20. X-Ray Apparatus and Hospital Equipment.
21. Cooking Equipment.

Contractors applying in connection with items 1, 2, 3, 4, 16 and 17 will be asked to state the limit of cost (maximum and/or minimum) of work for which they are prepared to tender, and to give an indication of the labour force normally employed.

Applications, on forms to be obtained from the undersigned, should be received by me not later than THURSDAY, 31st JULY, 1947.

C. P. BRUTTON,
Clerk of the County Council.

County Hall,
Dorchester,
17th June, 1947.

ROCHFORD RURAL DISTRICT COUNCIL.

TENDER FOR HOUSES/BUNGALOWS.

TENDERS are invited for the ERECTION of THREE PAIRS SEMI-DETACHED HOUSES and TWO PAIRS of BUNGALOWS, in two Contracts, at THE DRIVE, ROCHFORD.

Plans, Specifications, Bill of Quantities, Conditions of Contract, Form of Tender may be obtained on application to Mr. A. N. Box, Surveyor to the Council, on the payment of a deposit of Three Pounds, which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn, and the return of all documents.

Tenders must be endorsed "Tender for Houses/Bungalows," and be delivered to the undersigned not later than 10 a.m. on the 14th July, 1947.

No Tender will be received except in a special envelope provided, which must be sealed and shall not bear any name or mark indicating the sender.

The Council do not bind themselves to accept the lowest or any Tender, and reserve the right to divide the work between two firms if considered desirable.

S. C. HARRIS,
Clerk of the Council.

Council Offices,
Rochford, Essex
17th June, 1947.

BOROUGH OF ERITH.

COTTAGE REPAIRS.

The CORPORATION invite TENDERS from Builders and Contractors for INTERNAL REPAIRS and DECORATIONS, also EXTERNAL REPAIRS, POINTING and SLATING, to NOS. 1–4 (inclusive), CHARLES COTTAGES, MANOR-ROAD, ERITH, KENT.

General Conditions of Contract, Specification and Form of Tender may be obtained on application to the Borough Engineer and Surveyor, Council Offices, Erith, Kent, upon payment of One Guinea, which will be returned after delivery of a complete and bona-fide Tender (providing such Tender is not withdrawn) and the return of all documents.

Tenders must be on the form provided, enclosed in a sealed envelope endorsed on the outside "Tender for Cottage Repairs," and much reach the undersigned not later than 12 noon on FRIDAY, 11th JULY, 1947.

The successful Contractor must be prepared to enter into a formal contract and, if required, a bond with two sureties for the due performance of the Contract.

The Corporation do not bind themselves to accept the lowest or any Tender.

J. A. CROMPTON,
Town Clerk.

Council Offices,
Erith, Kent.
18th June, 1947.

BANSTEAD URBAN DISTRICT COUNCIL.

The above-named COUNCIL invite TENDERS for the PROVISION and ERECTION of approximately 1,150 lin. yards of WOOD POST and WIRE FENCING to TEMPORARY BUNGALOW SITE, HILLSIDE CLOSE, BANSTEAD.

Specifications and Forms of Tender may be obtained from the Surveyor, The Council House, Brighton-road, Banstead.

The General Conditions of Contract and Drawings may be inspected at the offices of the Surveyor at the above address.

Tenders, in plain sealed envelopes endorsed "Tender for Fencing, Hillside Close," but bearing no name or mark indicating the sender, must be returned to the undersigned not later than 12 o'clock noon on 19th JULY, 1947.

The Council do not bind themselves to accept the lowest or any Tender.

F. H. WILTSHIRE,
Clerk of the Council.

BOROUGH OF HOVE.

TENDERS are invited for ERECTING HOUSES on the COUNCIL'S HOUSING ESTATE at SUNNINGHILL, which are to be let in the following groups:—

Group 4	34 Houses.
Group 5	18 Houses.
Group 6	16 Houses.
Group 7	14 Houses.
Group 8	12 Houses.

Contractors will be permitted to tender for not more than two of the above groups.

Bills of Quantities and Forms of Tender may be obtained and Drawings and Form of Contract seen at the office of the Borough Surveyor (Mr. T. R. Humble, A.M.Inst.C.E.) on payment of Three Guineas in respect of each Group which will be returned on receipt of a bona-fide Tender.

The Council do not bind themselves to accept the lowest or any Tender or a Tender for more than one Group.

Tenders, on forms supplied, addressed to the undersigned and endorsed "Tenders for Houses, Group .....," must be delivered by not later than 10 a.m. on SATURDAY, 26th JULY, 1947, and the necessary documents will be available on and after 7th JULY.

JOHN E. STEVENS,
Town Clerk.

Town Hall,
Hove.
May, 1947.

COUNTY BOROUGH OF DERBY.

ERECTION OF SIX HOUSES AT FRANCIS-STREET SITE, DERBY.

The Corporation of Derby invite Tenders from competent Builders and Contractors for the ERECTION of ONE PAIR and ONE BLOCK of FOUR HOUSES, at FRANCIS-STREET, DERBY.

Forms of Tender and Bills of Quantities may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Derby, on or after Friday, 27th June, 1947, upon the deposit of £2 2s., which will be returned on receipt of a bona-fide Tender, or upon the immediate return of the documents, etc., if a Tender is not to be submitted.

The attention of the Contractor is especially drawn to the Clause in the General Conditions relating to the Standard Rate of Wages.

Sealed Tenders are to be sent in the official envelope provided, and are to be delivered at my office, Market Place, Derby, not later than 9 a.m., FRIDAY, 11th JULY, 1947, endorsed "Tenders for Houses—Francis-street."

Cheques should be made payable to "Derby Corporation."

The lowest or any Tender will not necessarily be accepted.

C. ASHTON,
Town Clerk.

Market Place,
Derby.

URBAN DISTRICT COUNCIL OF FAREHAM.

REBUILDING OF "COST OF WORKS" HOUSES.

Tenders are invited for the COMPLETE REBUILDING OF "BLAIR," CROFTON-LANE, STUBBINGTON.

Combined Specification and Bill of Quantities and Form of Tender may be obtained at the office of the Engineer and Surveyor, Westbury Manor, Fareham, where also Drawings and Conditions of Contract may be inspected. A deposit of £2 2s. will be required, which will be returned if a bona-fide Tender is submitted and all documents are returned.

Tenders, on the prescribed form, must be delivered to the undersigned not later than 12 noon on MONDAY, 14th JULY, 1947.

The Council does not bind itself to accept the lowest or any Tender.

HERBERT A. WATTS,
Clerk to the Council.

"Merton,"
5, Grove-road,
Fareham.
16th June, 1947.

FROME URBAN DISTRICT COUNCIL.

TENDERS FOR PERMANENT HOUSES.

SCHEME 2.

TENDERS are invited for the ERECTION of 28 TRADITIONAL TYPE HOUSES on the BROADWAY SITE, FROME.

Specification, Bills of Quantities, Conditions of Contract and Form of Tender may be obtained on application to Mr. R. H. Parkes, Surveyor, 22, Christchurch-street West, Frome, on payment of a deposit of £3 3s., which will be refunded on receipt of a bona-fide Tender not subsequently withdrawn, and the return of all documents.

Plans are available for inspection at the Office of the Surveyor.

Tenders, on the prescribed form, enclosed in a plain sealed envelope endorsed "Tender for Housing," and bearing no mark to indicate the senders, must be delivered to the undersigned not later than 12 noon on MONDAY, the 14th JULY, 1947.

Contractors may tender for one or more pairs of houses, as provided on the Tender form, and must satisfy the Council that they have sufficient labour to make an effective start and carry out the work.

The Council do not bind themselves to accept the lowest or any Tender, and reserve the right to accept the whole or any part of a Tender.

The acceptance of a Tender is subject to the approval of the Ministry of Health.

C. J. BARRINGTON,
Clerk of the Council.

Public Offices,
Frome, Somerset.
20th June, 1947.

SOUTHGATE BOROUGH COUNCIL.

TO BUILDERS AND CONTRACTORS.

ERECTION OF NEW FLATS AT RESERVOIR-ROAD, N.14.

The above-mentioned COUNCIL invite TENDERS for the ERECTION of 52 FLATS in Three Blocks at Reservoir-road, N.14. Plans can be seen by arrangement with the Borough Engineer and Surveyor, Mr. J. T. W. Peat, F.R.I.B.A., at the Town Hall, Palmers Green, N.13.

Contractors wishing to tender should make written application not later than Thursday, 17th July, 1947, to the Borough Engineer and Surveyor, enclosing cheque for £2 2s. as deposit for Form of Tender and Bills of Quantities. This deposit will be returned on receipt of a bona-fide Tender and/or the return of all documents. In the case of the accepted Tender, deposit will be retained until the contract and bond have been entered into with the Council, and in the event of withdrawal such deposit will be forfeited.

Form of Tender and Bills of Quantities will be forwarded to Contractors before Friday, 25th July, 1947, and Tenders in envelope provided must reach the undersigned not later than noon on FRIDAY, 15th AUGUST, 1947.

The Council do not bind themselves to accept the lowest or any Tender, and the acceptance of any Tender will be subject to the approval of the Ministry of Health.

GORDON H. TAYLOR,
Town Clerk.

Southgate Town Hall,
Palmers Green, N.13,
27th June, 1947.

ISLE OF ELY COUNTY COUNCIL.

Tenders are invited from Building Contractors for the following works: WHITTLESEY NEW SCHOOL SITE, on EASTREA-ROAD:

Construction of Children's Offices and Open Shelter on the playground, including all drains and plumbing, and all other necessary works.

Contractors wishing to Tender for the above works should apply to E. D. Robson, A.R.I.B.A., County Architect, County Hall, March, not later than Saturday, 5th July, 1947, enclosing a cheque for £2 2s., cheques made payable to the Isle of Ely Education Committee. Deposits will be returned on receipt of a bona-fide Tender.

Tenders are to be received by the Clerk of the County Council not later than Monday, 21st July, 1947, after which no Tenders will be considered.

The successful contractor will be required to enter into a formal contract, copy of which may be seen at the office of the County Architect.

The lowest or any Tender will not necessarily be accepted.

R. F. G. THURLOW,
Clerk of the County Council.

County Hall,
March,
Cambs.

FELIXSTOWE URBAN DISTRICT COUNCIL.

REPAIRING WAR DAMAGE, ALTERATIONS AND ADDITIONS, SPA PAVILION, FELIXSTOWE.

The FELIXSTOWE URBAN DISTRICT COUNCIL are desirous of receiving TENDERS from BUILDING CONTRACTORS for CARRYING OUT REPAIRS and ALTERATIONS and ADDITIONS to the SPA PAVILION, FELIXSTOWE.

Plans and Specifications will be available for inspection at the Office of Mr. J. A. Sherman, F.R.I.B.A., Architect to the Council, at 9, Northgate, Ipswich, and at the Surveyor's Office, Town Hall, Felixstowe, between the hours of 10 a.m. and 4 p.m. on ordinary weekdays, and between the hours of 10 a.m. and 12 o'clock noon on Saturdays, from Monday, 30th June, to Saturday, 12th July, 1947.

Building Contractors who wish to tender should submit their names and addresses to the Clerk to the Council, Town Hall, Felixstowe, by not later than TUESDAY, 15th JULY, 1947, accompanied by a deposit of £3 3s., which will be refunded on receipt of a bona-fide Tender. Bills of Quantities and Forms of Tender will then be sent to applicants with instructions as to tendering.

The Council do not bind themselve to accept the lowest or any Tender.

R. W. HARVEY,
Clerk to the Council.

Town Hall,
Felixstowe.
21st June, 1947.

TENDERS are invited for the CLEARANCE, LOADING and DISPOSAL of REFUSE.—Fuller details may be had on application to the WORKS MANAGER, THE BRITISH PLASTER BOARD, Ltd., Erith.

PUBLIC APPOINTMENTS

MIDDLESBROUGH EDUCATION COMMITTEE.

APPOINTMENT OF ASSISTANT ARCHITECTS.

Applications are invited for the following appointments on the established staff of the Architect's Section of the Education Offices:—

(a) TWO ASSISTANT ARCHITECTS, Grade IV (£420—£465).

(b) ONE ASSISTANT ARCHITECT, Grade I to II (£330—£405).

A cost-of-living bonus, at present £60 per annum, will be payable in addition to the basic salary in each case, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937.

The selected candidates will work under the immediate direction of the Architect to the Education Committee, Mr. T. Noel Mitchell, B.Arch. (Liverpool), A.R.I.B.A.

Applicants for appointments (a) must have had experience in the design and construction of modern buildings, including schools, and should have reached the standard of the Final examination of the R.I.B.A. A University Degree or Diploma in Architecture, and ability to carry out perspective drawing would be an advantage.

Applicants for appointment (b) must have had a good general experience, and should have reached the standard of the Intermediate Examination of the R.I.B.A.

Applications, stating appointment applied for, giving age, education, professional training and qualifications, experience, previous appointments, present appointment and salary, and service in the Forces (if any), together with copies of two recent testimonials, and the names of two persons to whom reference can be made, should be delivered to the Director of Education, Education Offices, Woodlands-road, Middlesbrough, not later than the first post on FRIDAY, 4th JULY, 1947.

Canvassing, directly or indirectly, will disqualify.

E. C. PARR,
Town Clerk.

Town Clerk's Office,
Middlesbrough.
May, 1947

COUNTY OF SOUTHAMPTON.

Applications are invited for the following appointments on the established staff of the County Architect's Department:—

(a) ASSISTANT ARCHITECT—Grade VII. Salary £575 rising by annual increments of £25 to £650 a year.

(b) ASSISTANT ARCHITECT—Grade V. Salary £460 rising by two annual increments of £15 and one of £20 to £510 a year.

(c) ASSISTANT QUANTITY SURVEYOR—Grade VI. Salary £535 rising by two annual increments of £20 and one of £25 to £600 a year.

A cost-of-living allowance, amounting at present to £59 16s. a year, is payable in addition to the above salaries.

Candidates for appointments (a) and (b) must be Registered Architects, preferably A.R.I.B.A., with good general experience in the design and construction of public buildings.

Candidates for appointment (c) should have the qualification F.A.S.I., and experienced in the preparation of Bills of Quantities and estimates, and in the settlement of final accounts on building contracts.

The appointments will be subject to the Local Government Superannuation Act, 1937, and candidates, before appointment, will be required to pass a medical examination.

The appointments will be terminable by one month's notice on either side.

Applications should be made on forms to be obtained from Simpson Low, A.R.I.B.A., Dipl.Arch., County Architect, The Castle, Winchester, to whom they should be returned not later than the 8th JULY, 1947.

G. A. WHEATLEY,
Clerk of the County Council.

The Castle,
Winchester.
16th June, 1947.

LONDON COUNTY COUNCIL.

HOUSING AND VALUATION DEPARTMENT.

Applications are invited for positions of HEATING and VENTILATING ENGINEERS, Grade III. Commencing salaries between £550 and £700 a year, according to qualifications and experience. Successful candidates will be considered for permanent appointment on the occurrence of vacancies, and will be superannuable.

Applicants must have had experience in the design and preparation of working drawings, specifications and estimates for modern hot-water heating, ventilating and hot-water supply systems for houses and domestic multi-storey buildings, including communal halls, laundries and drying rooms. Preference will be given to applicants with membership of the Institution of Heating and Ventilating Engineers or equivalent.

Forms of application obtainable from the DIRECTOR OF HOUSING AND VALUER, LONDON COUNTY COUNCIL, County Hall, S.E.1 (stamped addressed foolscap envelope required). (1777)

LONDON COUNTY COUNCIL.

COUNTY OF LONDON PLAN—VACANCIES FOR PLANNING STAFF.

Applications are invited for positions in the following grades:—

PLANNING OFFICER, Grade III, up to £700 a year.

TECHNICAL ASSISTANT, up to £580 a year.

Commencing rate according to qualifications and experience. Opportunities for competing for permanent appointment and promotion. Successful candidates will be superannuable.

The planning work involved includes assistance in the detailed development of reconstruction area schemes and the preparation of revised zoning plans.

A knowledge of current town planning legislation is desirable in all cases, and candidates for Grade III positions should possess architectural, surveying or town-planning qualifications.

Application forms, obtainable from Architect to the Council, County Hall, S.E.1 (enclose stamped addressed envelope), returnable not later than ten days from this date.

Canvassing disqualifies. (1680)

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46/SX/1

METROPOLITAN BOROUGH OF WOOLWICH.

Applications are invited for the following permanent appointments in the Borough Engineer and Surveyor's Department, at salaries in accordance with the Administrative, Professional And Technical Division of the National Scales of Salaries:—

(a) TWO ENGINEERING ASSISTANTS, Grade V, salary £480, rising to £530 per annum.
(b) ONE ARCHITECTURAL ASSISTANT, Grade VI, salary £555, rising to £630 per annum.

Cost-of-living bonus (at present £59 16s. p.a.) is payable in addition.

Applicants for—
(a) must have a good all-round municipal engineering experience, and possess appropriate qualifications;
(b) must have passed the final examination of the R.I.B.A. or have an equivalent qualification, and preferably have had experience in Architectural work, especially housing, undertaken by a local authority

The appointments will be subject to the Council's conditions of service in force from time to time, to the provisions of the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side.

The selected candidates will be required to pass a medical examination.

Applications, giving full details of age, qualifications and experience, should be forwarded, together with copies of not more than three recent testimonials, to reach the undersigned by 5th JULY 1947.

Candidates must disclose in writing if they are related to any member or senior officer of the Council.

Canvassing members of the Council, either directly or indirectly, will disqualify.

DAVID JENKINS,
Town Clerk.

Town Hall,
Woolwich, S.E.18.
June, 1947.

SLOUGH ESTATES, LTD., require a CHIEF SURVEYOR. A house at Slough (with garage) is included in the emoluments.

Applicant will be responsible—assisted by an adequate staff—for the development of the Company's Estates, involving factory design, land and building surveying.

Advanced knowledge of modern factory and industrial design and construction, including steel-frame and R/C construction, is essential. In addition, he must have had some experience in supervising the preparation of Builders' Quantities and preparing approximate estimates of cost of building work.

A qualification in Architecture is desirable.

He must also have had such experience as will enable him to direct theodolite levelling and making surveys, and to supervise the construction and maintenance of buildings, railways and sidings, roads, sewers and similar services.

Age: 35—45 years.

Duties to commence on 1st August, 1947.

Applicants should send full details of experience, qualifications and salary to Messrs. Welch and Lander, FF.R.I.B.A., 38, Gloucester-place, Portman-square, W.1, on or before 8th JULY, 1947.

LONDON COUNTY COUNCIL.

Required at the BRIXTON SCHOOL OF BUILDING, FERNDALE-ROAD, S.W.4, in September, 1947, a FULL-TIME LECTURER in WOODCUTTING MACHINISTS' WORK, to undertake responsibility for supervision and development of this section of the work of the school. Applicants should hold a City and Guilds Full Technological Certificate, or equivalent qualification, and must have had responsible experience in the industry, together with experience of teaching the theory and practice of the subject. Burnham Scale salary, plus London allowance. An allowance above scale salary will be considered in connection with the post. Application forms (stamped addressed foolscap envelope necessary) from the Principal, at the School, returnable by 19th JULY, 1947. (1833)

PEMBROKESHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff:—

(a) TWO SENIOR ASSISTANT ARCHITECTS. Grade VII (A.P. and T.). Salary £575—£650 per annum, plus cost-of-living bonus, now £59 16s. p.a. Experience in Education and General County work is desirable.
(b) SENIOR ASSISTANT ARCHITECT. Grade VI (A.P. and T.). Salary £535—£600 per annum, plus cost-of-living bonus, now £59 16s. p.a.
(c) ARCHITECTURAL ASSISTANT. Grade V (A.P. and T.). Salary £460—£510 per annum, plus cost-of-living bonus, now £59 16s. p.a.
(d) ARCHITECTURAL ASSISTANT. Grade III (A.P. and T.). Salary £390—£435 per annum, plus cost-of living bonus, now £59 16s. p.a.

Candidates must be qualified members of the R.I.B.A., with specialised knowledge and experience in contemporary architectural and/or structural design.

(e) CHIEF QUANTITY SURVEYOR. Grade VII (A.P. and T.). Salary £575—£650 per annum, plus bonus as above.
(f) SENIOR ASSISTANT QUANTITY SURVEYOR. Grade VI (A.P. and T.). Salary £535—£600, plus bonus as above.

Preference will be given to Professional Associates of the Surveyors' Institution (Quantity Surveyors' Division).

(g) CLERK OF WORKS. Salary scale—Miscellaneous Division (Grade II), £315—£360 per annum, plus cost-living bonus, now £59 16s. p.a. Applicants should have sound knowledge of all building trades, with experience in the upkeep and repair of buildings, and supervision of building works.

All the above appointments will be superannuable and subject to satisfactory medical examination. Canvassing will be a disqualification. Further particulars of these appointments and forms of application may be obtained from Walter Barrett, M.B.E., A.R.I.B.A., County Architect, County Offices, Haverfordwest, and should be completed and returned to him not later than MONDAY, 7th JULY, 1947.

W. E. BUFTON,
Clerk of the County Council.

County Offices,
Haverfordwest.
10th June, 1947.

CITY AND COUNTY OF THE CITY OF EXETER.

Applications are invited for the appointment of PRINCIPAL ASSISTANT ARCHITECT, EDUCATION SECTION, on the permanent staff of the City Architect's Department.

The salary will be in A.P.T. Grade VI, plus £50 per annum special allowance for educational work, and £59 19s. 3d. per annum cost-of-living bonus.

Housing accommodation will be found for the successful applicant.

Candidates should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications, and must be fully experienced in modern Educational work.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination.

Canvassing will disqualify, and candidates must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience, and the earliest possible date when available, together with copies of recent testimonials, should be sent to H. B. Rowe, F.R.I.B.A., A.M.I. Struct.E., City Architect, 2, Southernhay West, Exeter, not later than the 4th JULY, 1947.

C. J. NEWMAN,
Town Clerk.

Exeter.
17th June, 1947.

GLOUCESTERSHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECTS. Candidates should be qualified members of the R.I.B.A. with good general experience in design and construction of public buildings, including schools.
A.P. and T. Grade V and eligible for promotion to A.P. and T. Grade VI, plus cost-of-living bonus.
(b) ARCHITECTURAL ASSISTANTS. Candidates should have passed the Intermediate Examination of the R.I.B.A., with general experience in design and construction.
A.P. and T. Grade IV, plus cost-of-living bonus.
(c) JUNIOR ARCHITECTURAL ASSISTANTS. Salary in accordance with experience, A.P. and T Grades I-III, plus cost-of-living bonus.

Appointments will be subject to the Local Government Superannuation Act, 1937, and candidates, before appointment, will be required to pass a medical examination.

The appointments will be terminable by one month's notice on either side.

Applications, stating (1) name and address, (2) married or single, (3) age, (4) qualifications, (5) present position, salary and date appointed, (6) previous positions, with dates and salaries, (7) particulars of experience and accompanied by copies of three recent testimonials, should be sent to S. E. Urwin, F.R.I.B.A., County Architect, Shire Hall, Gloucester, not later than the 12th JULY, 1947.

GUY H. DAVIS,
Clerk of the County Council.

Shire Hall,
Gloucester.
10th June, 1947.

CUMBERLAND COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department, in accordance with the grades of the A.P. and T. Division of the National Scales of Salaries, as follows:—

(a) ASSISTANT ARCHITECTS (2). Grade V, £460—£510.
(b) ASSISTANT ARCHITECT (1). Grade IV, £420—£465.
(c) JUNIOR ASSISTANT ARCHITECT (1). Grade III, £390—£435.
(d) ARCHITECTURAL ASSISTANTS (4). Grade II, £360—£405.

Cost-of-living bonus, at present £59 16s. per annum, is payable in addition.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the persons appointed will be required to pass a medical examination.

Applicants for appointments (a), (b) and (c) must be registered Architects, and preference will be given to those applicants who are Associates of the R.I.B.A., and who have had experience in a Local Authority's Architectural Department.

Applications must be made on a form obtainable from J. H. Haughan, F.R.I.B.A., County Architect, 4, Alfred-street North, Carlisle, and should be returned completed to him, together with copies of not more than three recent testimonials, not later than the 21st JULY, 1947.

G. N. C. SWIFT,
Clerk of the County Council.

DEARNE URBAN DISTRICT COUNCIL.

HOUSING ESTATES FOREMAN.

Applications are invited for the above appointment at a salary of £300 per annum, rising, subject to satisfactory service, by annual increments of £25 up to £350 per annum, plus cost-of-living bonus, at present £59 16s. A dwelling-house will be made available if necessary.

Applicants must be able to drive a motor vehicle and have a sound knowledge of all building trades and ability to organise and supervise the whole of the repair work in connection with present and future housing estates, under the supervision of the Council's Engineer and Surveyor.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating qualifications, age, experience, and present employment, accompanied by copies of three recent testimonials, are to be delivered to me in a sealed envelope endorsed "Housing Estates Foreman," not later than SATURDAY, the 12th JULY, 1947.

F. HAWKESWORTH,
Clerk of the Council.

Council Offices,
Bolton-on-Dearne,
20th June, 1947.

COUNTY BOROUGH OF EAST HAM.

GENERAL FOREMAN/CLERK OF WORKS.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the above appointment from persons who have had extensive experience in the supervision of the erection of Municipal Buildings, Hospitals and similar classes of work. Salary in accordance with Grade A.P.T. II of the National Salary Scales (£380 × £15 — £425 per annum, inclusive of London Allowance), plus cost-of-living bonus (at present £59 16s. per annum). The commencing salary will be fixed according to the qualifications and experience of the person appointed.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937; to the Council's service regulations in force from time to time; and the successful candidate will be required to pass a medical examination.

Applications, on forms obtainable from the undersigned, and accompanied by copies of three recent testimonials, must be returned not later than FRIDAY, 11th JULY, 1947.

Canvassing will disqualify.

H. A. EDWARDS,
Town Clerk.

Town Hall,
East Ham, E.6.
June, 1947.

BOROUGH OF HESTON AND ISLEWORTH.

APPOINTMENT OF A JUNIOR TRACING ASSISTANT.

Applications are invited for the appointment of a JUNIOR TRACING ASSISTANT (Male or Female) in the Borough Engineer and Surveyor's Department, at a salary, according to age, within the General Division of the National Scale, plus London "weighting" and cost-of-living bonus, viz.:—

Male: £136 4s. at 18 years to £389 16s. per annum at 30 years.
Female: £115 4s. at 18 years to £312 2s. per annum at 30 years.

Candidates should be quick and accurate tracers, and experience in the office of a public authority will be considered an advantage.

The appointment is a permanent one; will be subject to the provision of the Local Government Superannuation Act, 1937; and will be terminable by one month's notice on either side. The successful candidate may be required to pass a medical examination, and the conditions of service will be those of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services.

A form of application may be obtained from the Borough Surveyor by sending a stamped addressed envelope. Applications, on the form provided, endorsed "Tracing Assistant," to be delivered to the Borough Surveyor, Council House, Hounslow, by not later than noon on 7th JULY, 1947.

Canvassing will disqualify.

HAROLD SWANN,
Town Clerk.

COUNTY BOROUGH OF WIGAN.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the position of ARCHITECTURAL ASSISTANT on the established staff of the Borough Engineer's Department, at a salary in accordance with A.P.T. V of the National Scale of Salaries (£460-£510), plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should be members by examination of the Royal Institute of British Architects and have had a wide architectural experience, preferably on educational buildings.

Applications (on forms to be obtained from the Borough Engineer), endorsed "Architectural Assistant," and accompanied by copies of not more than three recent testimonials, must be delivered to the Borough Engineer, Municipal Buildings, Wigan, not later than Monday, the 7th July, 1947.

ALLAN ROYLE,
Town Clerk.

Town Clerk's Office,
Municipal Buildings,
Library-street,
Wigan.
20th June, 1947.

BANSTEAD URBAN DISTRICT COUNCIL.

Applications are invited for the appointment of ASSISTANT ARCHITECT, on permanent staff. Grade IV (A.P. & T. Division) National Scale of Salaries, including "London weighting," £440 p.a., rising to £485 p.a. Candidates should be Registered Architects, preferably holding A.R.I.B.A. or equivalent qualification. Experience of Local Authority housing schemes and good general experience desirable.

In addition to salary stated, war bonus, at present £59 16s. p.a. for a man, £48 12s. p.a. for a woman, will be paid.

Forms of application to be obtained from the undersigned.

Last day for receipt of applications, 7th JULY, 1947.

Canvassing, directly or indirectly, will disqualify.

F. H. WILTSHIRE,
Clerk of the Council.

The Council House,
Brighton-road,
Banstead, Surrey.

COUNTY BOROUGH OF WEST HAM.

SURVEYING ASSISTANTS.

Applications are invited for the following:—

(a) CHIEF SURVEYING ASSISTANT. Salary A.P.T. Grade VII, £575 to £650 per annum, plus weighting and bonus.
(b) JUNIOR SURVEYING ASSISTANT. Salary Miscellaneous Division, Grade II, £315 to £360 per annum, plus weighting and bonus.

Full particulars of the duties and terms of the appointments, and an official form of application, which must be used and returned by the 12th JULY, 1947, may be obtained from the Borough Engineer, West Ham Town Hall, Stratford, E.15.

E. E. KING,
Town Clerk.

West Ham Town Hall,
Stratford, E.15.
June, 1947.

THE UNIVERSITY OF LIVERPOOL.

LIVERPOOL SCHOOL OF ARCHITECTURE.

Applications are invited for the post of SENIOR LECTURER IN ARCHITECTURAL CONSTRUCTION (Grade I) in the School of Architecture, at a salary scale of £850-£50-£1,050 per annum, together with child allowances.

Applications, accompanied if possible by drawings or photographs of work, two testimonials and the names of two referees, should be received not later than 18th August, 1947, by the undersigned, from whom particulars of the conditions of appointment may be obtained

STANLEY DUMBELL,
Registrar.

June, 1947.

BERKSHIRE COUNTY COUNCIL.

ENGINEERING ASSISTANT.

Applications are invited for the appointment in the County Architect's Department of an ENGINEERING ASSISTANT at a salary of £460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum (A.P.T. Grade V), plus bonus. The cost-of-living bonus is at present £59 16s. per annum.

Candidates for the appointment should be members of the Institution of Heating and Ventilating Engineers and should have had wide experience in design and supervision of heating, hot-water supply, electrical and general mechanical installations.

The appointment will be subject to the Local Government Superannuation Act; to one month's notice on either side; to the successful candidate passing a medical examination; and to the Council's General Conditions of Service for Administrative, Professional, Technical and Clerical Staff for the time being in force.

Other factors being equal, preference will be given to registered disabled persons.

Application forms can be obtained on receipt of a stamped addressed envelope from the County Architect, 35, Bath-road, Reading, to whom they should be returned completed, together with copies of three recent testimonials, on or before SATURDAY, 12th JULY, 1947.

H. J. O. NEOBARD,
Clerk of the Council.

Shire Hall,
Reading.

CITY OF BIRMINGHAM.

PUBLIC WORKS DEPARTMENT.

APPOINTMENT OF ARCHITECTS AND QUANTITY SURVEYORS.

Applications are invited for the following appointments in the Public Works Department:—

(a) TWO SENIOR ARCHITECTS (Grade I). A.P.T. Grade VI (£535—£600);
(b) TWO SENIOR ARCHITECTS (Grade II). A.P.T. Grade V (£460—£510).
(c) TWO ASSISTANT ARCHITECTS. A.P.T. Grade III (£390—£435);
(d) ASSISTANT QUANTITY SURVEYORS. A.P.T. Grade V (£460—£510);

plus the war bonus, at present amounting to £59 19s. per annum, in each case.

Applicants for appointment (d) must be qualified Quantity Surveyors with 10 years' service in a Quantity Surveyor's office, and for the other appointments they must be Registered Architects, preference being given to members of the Royal Institute of British Architects.

After a satisfactory period of probationary service the appointments will be on the permanent staff of the Corporation and will be subject to the provisions of the Local Government Superannuation Act, 1937. The successful applicants will be required to undergo a medical examination.

Applications, suitably endorsed, stating age, qualifications and experience, and accompanied by copies of not more than three recent testimonials, are to be sent to my office not later than MONDAY, 14th JULY, 1947.

HERBERT J. MANZONI,
City Engineer and Surveyor.

The Council House, Birmingham, 1.

SOUTHAMPTON COUNTY BOROUGH.

BOROUGH ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ASSISTANT BUILDING INSPECTORS.

Applications are invited for the appointment of THREE ASSISTANT BUILDING INSPECTORS (permanent), Grade I, £330—£375, plus cost-of-living bonus, amounting to £59 16s. per annum.

General experience in all classes of building is essential, and preference will be given to candidates who are suitably qualified by examination and have had experience of similar work with a Local Authority.

Applications, giving full particulars of age, qualifications and experience, accompanied by copies of two recent testimonials, should be sent to Denis Winston, M.A., B.Arch., A.R.I.B.A., M.T.P.I., Civic Centre, Southampton, not later than 10th JULY, 1947.

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

INSPECTOR OF WORKS required by the Tanganyika Government Railways, for one tour of 24 and 36 months in the first instance. Salary, according to age, qualifications and experience, in the scale £372 rising to £480 a year. On salary of £372 a year there is a cost-of-living allowance of £45 for single men, and for married men of between £80 and £120, according to number of dependants. Outfit allowance £60. Free passages and quarters. Provident Fund. Candidates, preferably single, and not over 40 years of age, should have served an apprenticeship as carpenter and joiner, bricklayer, or mason, and have good general building and bridgework experience as Foreman on the construction of public works, including plain and reinforced concrete work. Some experience on pile driving work desirable.—Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to THE CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/N/17937 on both letter and envelope.

LEEDS COLLEGE OF TECHNOLOGY.

PRINCIPAL: C. CHEW, M.Sc.Tech., F.R.I.C.

DEPARTMENT OF BUILDING.

Applications are invited for the full-time post of LECTURER in Building subjects in this Department. Duties to begin in September next.

Applicants should possess a recognised professional qualification, together with industrial and some technical teaching experience. Ability to teach structural work will be an added recommendation. Salary according to Burnham Scale for Technical Colleges: minimum £300, annual increments £15, maximum £525. Additions for degree or equivalent and for approved training. Previous teaching service, industrial experience up to 10 years and war service will be taken into account in determining commencing salary.

Further particulars and forms of application, to be returned within two weeks of the appearance of this advertisement, will be forwarded on receipt of a stamped addressed foolscap envelope by the undersigned.

GEORGE GUEST,
Director of Education.

Education Offices,
Leeds, 1,
June, 1947.

MALVERN URBAN DISTRICT COUNCIL.

CLERK OF WORKS.

Applications are invited for the appointment of a TEMPORARY CLERK OF WORKS on the staff of the Surveyor and Water Engineer, to supervise site preparation work and the erection of permanent and temporary houses, at a salary of £8 per week, plus cost-of-living bonus (at present £1 3s. per week).

Applications, stating age, details of experience and previous appointments, accompanied by copies of at least two recent testimonials, enclosed in envelopes endorsed "Clerk of Works," should reach the undersigned not later than THURSDAY, the 10th JULY, 1947.

J. BULMAN,
Clerk of the Council.

The Council House,
Malvern.
18th June, 1947.

COUNTY BOROUGH OF BURNLEY.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments:—

(1) CHIEF PLANNING ASSISTANT, GRADE VII, £575—£650 per annum, plus bonus, at present £59 16s. per annum. Candidates must have had considerable experience in all aspects of statutory planning, interim development control, and planning procedure in general. Candidates should be Associate Members of the Town Planning Institute, and, in addition, should have passed the final examination of one of the following Institutions: Institution of Municipal Engineers, Royal Institution of Chartered Surveyors, Royal Institution of British Architects. Administrative experience will be an advantage.
(2) SENIOR PLANNING ASSISTANT, GRADE V, £460—£510 per annum, plus bonus, at present £59 16s. per annum; and
(3) PLANNING ASSISTANT, GRADE IV, £420—£465 per annum, plus bonus, at present £59 16s. pe rannum.

Candidates for appointments (2) and (3) should be Associate Members of the Town Planning Institute, and the holding of any other qualification in addition will be an advantage. Experience in a similar capacity in a Planning Office is essential.

(4) PLANNING ASSISTANT, GRADE II, £360—£405 per annum, plus bonus, at present £59 16s. per annum. Applicants should have had interim development experience in a Planning Office, and preference will be given to candidates who are Students of the Town Planning Institute.
(5) SENIOR ARCHITECTURAL ASSISTANT, GRADE V, £460—£510 per annum, plus bonus, at present £59 16s. per annum. Applicants should have had experience in the design of Educational Buildings, and preference will be given to Associates of the Royal Institute of British Architects. The commencing salary for this appointment will be fixed in accordance with experience and qualifications.
(6) ENGINEERING ASSISTANT, GRADE IV, £420—£465 per annum, plus bonus, at present £59 16s. per annum. Applicants must be Associate Members of the Institution of Civil Engineers, or hold the Testamur of the Institution of Municipal Engineers, and must have had considerable experience in all types of sewerage works.

Conditions of appointment are those formulated by the National Joint Council, and all appointments are subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidates will be required to pass a medical examination.

Forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned, in the envelope provided, not later than 9 a.m. on MONDAY, the 14th JULY, 1947.

C. V. THORNLEY,
Town Clerk.

Town Hall,
Burnley,
17th June, 1947.

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

QUANTITY SURVEYOR (Temporary) required by the Government of Jamaica, Public Works Department, for one tour of three years in the first instance. Commencing salary (up to maximum to a well-qualified candidate) in the scale £750 rising to £850 a year. Free passages. Candidates, not over 40, should be Chartered Quantity Surveyors and be thoroughly experienced in Quantity Surveying in all its aspects. They must be capable of teaching junior staff in the work.—Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to THE CROWN AGENTS FOR THE COLONIES, 4, Millbank, London, S.W.1, quoting M/X/17667 on both letter and envelope.

NORFOLK EDUCATION COMMITTEE.

THE TECHNICAL INSTITUTE, KING'S LYNN.

Organising Master: W. A. BURROWS, B.Sc.

Applications are invited from suitably qualified persons for the following full-time appointments:—
TEACHER OF COMMERCIAL SUBJECTS.
TEACHER OF TECHNICAL SUBJECTS (with special qualifications in Building Construction or Engineering).

Salary in accordance with Burnham Technical Scale (£300 by £15 to £525, with Graduate and Training Allowance if appropriate).

Further particulars and form of application may be obtained on receipt of a stamped addressed envelope from the Chief Education Officer, County Education Offices, Staracey-road, Norwich. Applications must be submitted within ten days of the appearance of this advertisement, and the envelope must be endorsed "Staff Appointment—King's Lynn Technical Institute."

BRITISH POTTERY RESEARCH ASSOCIATION.

NEW RESEARCH STATION, PENKHULL, STOKE-ON-TRENT.

Applications are invited for the appointment of CLERK OF WORKS to supervise the erection of the above, strictly under the instructions of the Architects, Messrs. Wood, Goldstraw & Yorath, Tunstall, Stoke-on-Trent.

Applicants must be experienced in all building trades and have had previous experience as Clerk of Works. Knowledge of electric lighting and heating installations desirable.

Applications, together with copies of testimonials and particulars of previous experience, to be sent to:

S. H. DODD, O.B.E.,
Secretary,
British Pottery Research Association,
Federation House,
Stoke-on-Trent,

not later than 14th JULY, 1947.

BRIERLEY HILL URBAN DISTRICT COUNCIL.

APPOINTMENT OF HOUSING MAINTENANCE OFFICER.

Applications are invited for the above-mentioned appointment from persons suitably qualified, at a salary within Miscellaneous Division, Grade I, of the National Scales of Salary, i.e., £255—£300 per annum, plus temporary cost-of-living bonus of £59 16s. per annum.

The person appointed will be required to supervise the work of general repairs to property, the organisation of building trade employees, transport, and the ordering of materials.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to the passing of a medical examination.

Applications, stating age, qualifications and experience, accompanied by three recent testimonials, must be received by the undersigned not later than SATURDAY, 12th JULY, 1947.

HERBERT HEX,
Clerk of the Council.

Council Offices,
Moor-street,
Brierley Hill,
20th June, 1947.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

TREASURER'S DEPARTMENT.

APPOINTMENT OF COST AND WORKS ACCOUNTANCY ASSISTANT.

Applications are invited for the above appointment in Grade "D" Professional, with a commencing salary, to be fixed by reference to the qualifications and experience of the person appointed, within the range of £535, rising by two increments of £20 and one of £25 to £600 per annum, together with a variable cost-of-living bonus (at present £59 16s. per annum).

Candidates must have passed the Final Examination of the Institute of Cost and Works Accountants, the Institute of Municipal Treasurers and Accountants (Inc.), the Institute of Chartered Accountants, the Society of Incorporated Accountants and Auditors, or other recognised accountancy body. Preference will be given to candidates who have had practical experience of cost accountancy and stores control in the Finance Department of a Local Authority.

Form of application, to be obtained from the undersigned, should be returned to him not later than 11th JULY, 1947. The post is subject to the provisions of the Local Government Superannuation Act, 1937, and a satisfactory medical certificate will be required from the successful candidate.

Applicants serving in H.M. Forces should indicate their release group and probable date of demobilisation.

Canvassing, directly or indirectly, will be a disqualification.

JOHN DURHAM,
West Riding Treasurer.

County Hall,
Wakefield.
June, 1947.

URBAN DISTRICT COUNCIL OF FAREHAM.

APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the temporary appointment of CLERK OF WORKS in connection with the Council's Housing programme, and at a salary of £8 8s. per week, inclusive of war bonus.

Applicants must have had good experience in building construction, be able to set out and supervise house construction and ancillary road and drainage work, check quantities of materials used, and generally assist the Council's Engineer and Surveyor with all work relative to the Council's Housing Contracts.

Applications, stating age, qualifications and experience, and accompanied by two recent testimonials, must be received by the undersigned in a sealed envelope endorsed on the outside "Clerk of Works," not later than SATURDAY, 19th JULY, 1947.

HERBERT A. WATTS,
Clerk to the Council.

"Merton," 5, Grove-road,
Fareham.
20th June, 1947.

COUNTY BOROUGH OF BARROW-IN-FURNESS.

BUILDING MANAGER.

Applications are invited for the appointment of BUILDING MANAGER at a salary of £535, rising by two annual increments of £20 and one of £25 to £600 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants must have a wide practical building experience, and be able to take complete charge of all types of building operations, equipment and labour.

The gentleman appointed will be in charge of the Council's Building Department, and his general duties will be as may be required by the Council from time to time:—

1. To estimate for and erect new houses for the Council under the Housing Acts.
2. To estimate for and carry out the general building work of the Council if so required.
3. To carry out the work of repairs and maintenance of the Council houses or such other public buildings as the Council may direct.

The appointment will be subject to: (1) the National Scheme of Conditions of Service; (2) the provisions of the Local Government Superannuation Act, 1937; (3) termination by one month's notice in writing on either side; (4) to the successful applicant passing a medical examination; and (5) becoming a member of the appropriate Trade Union.

Particulars of duties and form of application may be obtained from the undersigned, and should be returned completed by the 12th JULY, 1947.

Canvassing in any form will disqualify.

W. LAWRENCE ALLEN,
Town Clerk.

Town Hall,
Barrow-in-Furness.

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

ASSISTANT QUANTITY SURVEYOR, Grade VI, at a commencing salary of £535, rising by annual increments of £20-£25 to a maximum of £600 per annum,

Preference will be given to applicants who are members of the Surveyors' Institution (Quantities Sub-Division), and who have an adequate experience in the preparation of bills of quantities, and in measuring up and in settlement of final accounts.

The appointment will be subject to the provisions of the Local Government Act, 1937, and the successful applicant will be required to pass a medical examination.

ARCHITECTURAL ASSISTANT, Grade I, at a commencing salary of £350, rising by annual increments of £15 to £375 per annum, plus London allowance of £20, together with war bonus, at present £59 16s. per annum.

Applicants should be of good general training and experience.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 18th JULY, 1947.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND,
Clerk of the Council.

County Hall,
Kingston-upon-Thames.

COUNTY OF ESSEX.

WALTHAMSTOW COMMITTEE FOR EDUCATION.

ARCHITECTURAL STAFF.

The Essex County Council invite applications for the appointment of one CHIEF ASSISTANT ARCHITECT and TWO SENIOR ASSISTANT ARCHITECTS.

Applicants should be Members of the Royal Institute of British Architects and have had considerable experience in the planning, designing, construction and supervision of school buildings, and have had some administrative experience.

The salary scales will be: Chief Assistant Architect £575 × £25 — £650 per annum, and the Senior Assistant Architect £460 × £15 — £510 per annum. There will also be paid such bonus and travelling and subsistence allowances as may from time to time be determined by the Council. The present bonus is 23s. per week.

Application forms and further details obtainable from the Borough Education Office, Town Hall, Walthamstow.

B. E. LAWRENCE.
Chief Education Officer.

County Offices,
Chelmsford.

BOROUGH OF LEYTON.

APPOINTMENT OF TEMPORARY GENERAL ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a TEMPORARY GENERAL ARCHITECTURAL ASSISTANT in the Department of the Borough Engineer and Surveyor, at a salary in accordance with Grade V of the National Conditions of Service (£460 per annum, rising by two annual increments of £15 and one of £20 to £510 per annum), plus £20 London Weighting, and cost-of-living bonus, which is at the present time £59 16s. per annum.

Candidates should possess recognised architectural qualifications (preferably A.R.I.B.A.) and have had good Municipal experience.

The appointment will be subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services; to the provisions of the Local Government Superannuation Act, 1937; and to the successful candidate satisfying the Council's Medical Officer of Health as to his medical fitness. The appointment will also be subject to the Council's Conditions of Service, which include membership of a Trade Union.

Applications, stating age, details of qualifications and experience, together with copies of three recent testimonials, should be delivered to the Borough Engineer and Surveyor not later than the 19th JULY, 1947.

Canvassing, directly or indirectly, will disqualify, and candidates must disclose in their application whether they are related to any member or senior officer of the Council.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.
June, 1947.

ST. ALBANS RURAL DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the temporary appointment of ARCHITECTURAL ASSISTANT in the Surveyor's Department.

The commencing salary will be £535 per annum, rising by three annual increments of £20, £20 and £25 to a maximum of £600, plus cost-of-living bonus, now standing at £59 16s.

The successful candidate will be required to pass a medical examination.

Applicants should preferably be Associates of the R.I.B.A. (or possess an Intermediate qualification), and must have extensive experience in Planning, Housing and Construction of Roads and Sewers.

The appointment will be for a minimum period of five years, and subject to the Local Government Superannuation Act, 1937.

Applications, stating age, training, experience and qualifications, together with copies of three recent testimonials, to be sent to the undersigned not later than first post THURSDAY, 3rd JULY, 1947.

FRANK FITCH,
Clerk to the Council.

Council Offices,
43, Upper Lattimore-road,
St. Albans, Herts.

WILTS COUNTY COUNCIL.

CHIEF ASSISTANT ARCHITECT.

The COUNTY COUNCIL invite applications for the post of CHIEF ASSISTANT ARCHITECT in the County Architect's Department.

Applicants should be Associates of the Royal Institute of British Architects or hold equivalent qualifications.

Salary in accordance with Grade VIII of the National Scales, viz., £625 by increments of £25 to £700 per annum, plus war bonus (at present £59 16s. per annum).

Applicants should have had experience in the office of a public authority, and be conversant with school planning as required by the Education Act of 1944.

The appointment is superannuable subject to medical examination and terminable by one month's notice on either side.

Forms of application may be obtained from the County Architect, County Hall, Trowbridge, and should be forwarded to the undersigned not later than 11th JULY, 1947.

P. A. SELBORNE STRINGER,
Clerk of the County Council.

County Hall,
Trowbridge, Wilts,
June, 1947.

WILTS COUNTY COUNCIL.

BUILDING INSPECTOR.

The COUNTY COUNCIL invite applications for the appointment of a BUILDING INSPECTOR in the County Architect's Department.

The applicants must have a thorough practical knowledge of the building trade and should preferably have served in the capacity of a Clerk of Works or General Foreman. Salary £390, rising by annual increments of £15 to £435 per annum, plus war bonus (which is at present £59 16s. per annum).

The appointment is superannuable, subject to medical examination, and terminable by one month's notice on either side.

The successful candidate must reside in or near Trowbridge and provide a car for the performance of his duties. Travelling allowance is payable in accordance with the county scale.

Applications, stating age, qualifications, experience, present appointment, previous appointments, etc., and giving the names of three persons to whom reference may be made, should be addressed and delivered to the Clerk of the County Council, County Hall, Trowbridge, not later than the 11th JULY, 1947.

P. A. SELBORNE STRINGER,
Clerk of the County Council.

County Hall,
Trowbridge, Wilts,
June, 1947.

COUNTY BOROUGH OF BOOTLE.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following permanent positions in the Department of the Borough Engineer and Surveyor:—

(a) TOWN PLANNING ASSISTANT, at a commencing salary of £460 per annum, rising, subject to satisfactory service, to £510 per annum, in accordance with A.P.T. Grade V. Applicants should be Associate Members of the Town Planning Institute, and have had good experience of town planning in built-up areas. Preference will be given to those with architectural or engineering qualifications in addition.

(b) JUNIOR ENGINEERING ASSISTANT, at a commencing salary of £330 per annum, rising, subject to satisfactory service, to £375 per annum, in accordance with A.P.T. Grade I. Applicants should preferably have an engineering degree of a British University, or hold the Testamur of the Institution of Municipal Engineers, and have had some experience in the design and construction of municipal engineering works.

The above appointments are all subject to one month's notice on either side, and the salaries quoted are subject to the addition of a cost-of-living bonus, which is at present approximately £60 per annum.

The persons appointed will be required to pass a medical examination, to contribute to the Superannuation Fund established under the Superannuation Act, 1937, and to be subject to the Rules and Regulations of the Council.

Canvassing, directly or indirectly, in connection with these appointments, shall disqualify a candidate.

Special consideration will be given to applicants registered under the Disabled Persons (Employment) Act, 1944.

Applications for these appointments must be made on the forms which may be obtained from Mr. W. A. Harrison, O.B.E., M.Eng.(Liverpool), M.I.C.E., M.I.Mun.E., Borough Engineer and Surveyor, Town Hall, Bootle, to whom they should be returned in a sealed envelope, endorsed with the title of the appropriate position, so as to reach him not later than 10 a.m. on MONDAY, 14th JULY, 1947.

By order,
HAROLD PARTINGTON,
Town Clerk.

Borough Engineer's Office,
Town Hall,
Bootle,
Liverpool, 20,
27th June, 1947.

ST. ALBANS RURAL DISTRICT COUNCIL.

APPOINTMENT OF SHORTHAND-TYPIST.

Applications, stating age, training, experience and ment of SHORTHAND-TYPIST (MALE), aged 30 or over in the Surveyor's Department.

Commencing salary £300, plus cost-of-living bonus, now standing at £59 16s.

Preference will be given to applicants with some years' experience in a similar position in the office of an architect or builder.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applications are invited for the permanent appointqualifications, with copies of three recent testimonials, to reach the undersigned not later than first post THURSDAY, 3rd July, 1947.

FRANK FITCH,
Clerk to the Council.

Council Offices,
43, Upper Lattimore-road,
St. Albans, Herts.

THE CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—

INSPECTOR OF WORKS (TEMPORARY STAFF) required by the Nigerian Government Public Works Department for one tour of 18 to 24 months in the first instance. Salary £500 a year, plus local allowance of £30 a year, and for married men separation allowance between £84 and £204 a year, according to number of children. Outfit allowance £60. Free passages and quarters. Candidates, not over 40 years of age, must have a knowledge of general building work and have had experience in small water works construction and maintenance, including pipe-laying.—Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to THE CROWN AGENTS FOR the COLONIES, 4, Millbank, London, S.W.1, quoting M/N/12964 on both letter and envelope.

BOROUGH OF BARNES.

Applications are invited for the position of TEMPORARY ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department at a salary of £400 per annum, plus bonus, at present £59 16s. per annum.

Applicants should be good draughtsmen and be capable of preparing plans for housing and other architectural work.

Applicants should have passed one of the following examinations:

Degree in Architecture of a British University,
Royal Institute of British Architects.

Applications, giving the names of three gentlemen to whom reference can be made should reach the undersigned by SATURDAY, 12th JULY, 1947.

W. E. SHEPHERD, A.M.I.C.E.,
Borough Engineer and Surveyor.

Municipal Offices,
Sheen-lane, S.W.14.

BOROUGH OF NEWCASTLE-UNDER-LYME.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ONE JUNIOR ENGINEERING ASSISTANT on the staff of the Borough Engineer and Surveyor.

The salary will be according to age within the General Division of the National Scales.

Applicants should be students of the Institute of Municipal and County Engineers, and previous municipal experience would be an advantage but is not essential.

The appointment carries, in addition to the salary in the General Division, a cost-of-living bonus amounting at present to £59 16s. per annum. The appointment is terminable by one month's notice on either side and is subject to the provisions of the Local Government Superannuation Act, 1937, the successful applicant being required to pass a medical examination by the Borough Medical Officer of Health.

Applicants shall disclose whether to their knowledge they are related to any member of, or the holder of any senior office under, the Council.

Canvassing in any form will be a disqualification.

Applications, stating age, qualifications, present appointment and experience, together with copies of three recent testimonials, should be forwarded to me not later than 31st JULY, 1947.

C. J. MORTON,
Town Clerk.

District Bank House,
Penkhull-street,
Newcastle-under-Lyme.
June, 1947.

CITY OF YORK.

Applications are invited for the following appointments in the City Engineer and Architect's Department:—

TWO ARCHITECTURAL ASSISTANTS (Grade V—£460—£510), and ONE ARCHITECTURAL ASSISTANT (Grade IV—£420—£465). The salaries stated are exclusive of cost-of-living bonus, at present £59 16s.

Applicants must hold an appropriate architectural qualification, have had good experience in general architectural work, particularly in connection with schools, and should be experienced in the preparation of working drawings and details. Preference will be given to Associates of Royal Institute of British Architects.

Applications, stating age, qualifications and previous experience, with copies of three recent testimonials, to be sent to the undersigned not later than noon on 8th JULY, 1947. The successful applicants will be required to pass a medical examination, and the appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the terms and conditions of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services. Applicants must disclose in writing whether to their knowledge they are related to any member of the Council or the holder of any senior office under the Council.

Canvassing in any form will disqualify.

CHAS. J. MINTER,
City Engineer and Architect.

Guildhall, York,
20th June, 1947.

REVISED ADVERTISEMENT.

BOROUGH OF HESTON AND ISLEWORTH.

APPOINTMENT OF GENERAL ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grade III of the A.P.T. Division of the National Scale, viz., £390—£15—£435 per annum, plus £20 per annum London "weighting" and £59 16s. per annum cost-of-living bonus. Candidates should have good architectural experience and should have passed the Intermediate Examination qualifying for Associate Membership of the Royal Institute of British Architects. Preference will be given to candidates who have had experience in the preparation of working and detailed drawings in connection with housing and other local government work. The appointment is a permanent one, and will be subject to the provisions of the Local Government Officers Superannuation Act, 1937, and the National Scheme of Conditions of Service, and will be terminable by one month's notice on either side. The successful candidate may be required to pass a medical examination. Forms of application may be obtained from the Borough Surveyor by sending a stamped addressed envelope. Applications, on the forms provided, should be delivered to the Borough Surveyor, Council House, Hounslow, not later than noon on 9th JULY, 1947. Canvassing will disqualify.

HAROLD SWANN,
Town Clerk.

BOROUGH OF GRAVESEND.

ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Borough Architect's Department, at a salary in accordance with Grade V, A.P.T.—£460—£510 per annum, plus bonus, at present £59 16s. per annum.

Applicants should be members of the R.I.B.A. and have had considerable experience in the design and construction of houses and Public Buildings.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the National Conditions of Service, and will be terminable by one month's notice on either side. The successful applicant will be required to pass a medical examination.

Applications, stating age, particulars of appointments held, experience and qualifications, together with three recent testimonials, and endorsed "Architectural Assistant," must be forwarded to the Borough Architect, 5, Woodville-terrace, Gravesend, to arrive not later than 3rd JULY, 1947.

Canvassing, directly or indirectly, will be deemed a disqualification.

F. W. HARRISON,
Town Clerk.

4, Woodville-terrace,
Gravesend.

MIDDLESEX COUNTY COUNCIL.

JUNIOR HEATING ENGINEERING ASSISTANTS required. Experienced in preparation of schemes for central heating and domestic hot-water systems and good technical training essential. Commencing salary £335 p.a. on Misc. Div., Grade II, rising to £380 p.a., plus any temp. bonus (now £60 p.a.). Established and pensionable, subject to medical exam. Applications, stating age, full details education, qualifications and experience to The County Architect, Middlesex House, S.W.1, within seven days of this advert. (Quoting C.71B.)

C. W. RADCLIFFE,
Clerk of the County Council.

Middlesex Guildhall, S.W.1.

BOROUGH OF NELSON.

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of SECOND ARCHITECTURAL ASSISTANT in the Borough Surveyor's Department, at a salary in accordance with Grade IV of the National Scale, £420—£15—£465, plus cost-of-living bonus, at present £59 16s. per annum.

Candidates should have had experience in housing and general work. Applications, giving detailed particulars of experience and qualifications, endorsed "Architectural Assistant," with copies of three recent testimonials, to be delivered to the undersigned on or before Wednesday, 9th JULY, 1947.

F. W. ROBERTS,
Town Clerk.

Town Hall,
Nelson,
Lancashire.
16th June, 1947.

METROPOLITAN BOROUGH OF FULHAM.

ELECTRICITY DEPARTMENT.

Applications are invited from candidates not more than 40 years of age for two positions of TEMPORARY DRAUGHTSMAN (one Architectural and and Mechanical). Applicants must be capable of carrying out their own calculations and of preparing working drawings from site measurements.

Salary up to £10 per week, according to age and qualifications, plus cost-of-living bonus.

Forms of applications and conditions of appointment may be obtained on sending stamped, addressed foolscap envelope to the undersigned, to whom completed applications must be returned.

CYRIL F. THATCHER,
Town Clerk.

Town Hall,
Fulham, S.W.6.
June, 1947.

IMPERIAL COLLEGE.

Applications are invited from CHARTERED SURVEYORS for a permanent appointment as OFFICER responsible for maintenance (including minor alterations) of Imperial College buildings at South Kensington, including premises at Out-Station. Practical experience of building trade and bye-laws essential. Applicants should have knowledge of quantities, experience of building licensing procedure, and be capable of preparing detail specifications. Salary £800 per annum, with Federated Superannuation. Applications, not later than 18th JULY, 1947, to Secretary, Imperial College, Prince Consort-road, S.W.7.

CIVIL SERVICE COMMISSION.

The Civil Service Commissioners give notice that the closing date for the receipt of applications from civilian candidates for the RECONSTRUCTION COMPETITION for the WORKS GROUP (Architects, Surveyors, Quantity Surveyors, Civil Engineers and Lands Officers) has been extended to 15th JULY, 1947. In addition to the vacancies previously announced there are now vacancies for Civil Engineers in the Air Ministry.

COUNTY OF ESSEX.

ILFORD COMMITTEE FOR EDUCATION.

APPOINTMENT OF SECTIONAL ASSISTANT ARCHITECT.

The ESSEX COUNTY COUNCIL invite applications for the appointment of a qualified ASSISTANT ARCHITECT to act as leader of a Section in the Office of the Borough Engineer of Ilford, to deal with work for the Committee for Education.

Applicants should be Members of the Royal Institute of British Architects and have had considerable experience in the planning, designing, construction and supervision of school buildings, and have had some administrative experience.

The commencing salary will be not less than £575 per annum nor more than £650, and in fixing the commencing salary regard will be had to the qualifications and experience of the successful applicant. There will also be paid such bonus and travelling and subsistence allowances as may from time to time be determined by the Council. The present bonus is 23s. per week.

Application forms and further details obtainable from the Borough Education Officer, Town Hall, Ilford.

B. E. LAWRENCE,
Chief Education Officer.

County Offices,
Chelmsford.

METROPOLITAN BOROUGH OF HAMPSTEAD.

LICENSING INSPECTORS.

Applications are invited for the appointment of TWO LICENSING INSPECTORS (temporary) for Civil Building Control in the Housing Architect's Section of the Borough Engineer and Surveyor's Department, at a salary of £380 per annum, plus bonus—at present £59 16s. per annum.

Age limit: 45 years on the 1st June, 1947.

Applicants should have had good practical experience of the building trade and possess a knowledge of builders' quantities. Persons appointed will be required to check applications for Civil Building Licences.

Applications, stating (a) age, (b) qualifications, (c) present and past appointments, with dates and salaries, (d) particulars of experience, and accompanied by copies of two recent testimonials, must be delivered to the undersigned in a sealed envelope, endorsed "Licensing Inspector," not later than FRIDAY, 11th JULY, 1947.

Canvassing will disqualify.

P. H. HARROLD,
Town Clerk.

Town Hall,
Haverstock Hill, N.W.3.
June, 1947.

COUNTY BOROUGH OF ROTHERHAM EDUCATION COMMITTEE.

ROTHERHAM TECHNICAL COLLEGE.

Principal: F. C. CLARKE, B.Sc., A.R.C.Sc., A.M.I.E.E.

DEPARTMENT OF MECHANICAL AND CIVIL ENGINEERING AND BUILDING.

Applications are invited from suitably qualified candidates for the post of LECTURER in BUILDING. Candidates should possess qualifications rendering them able to take students for advanced courses in Building and Allied subjects. Practical industrial experience desirable.

Salary according to the Burnham Report, 1945, due allowance being made for training, teaching and industrial experience.

Application Forms may be obtained from the undersigned. They should be returned accompanied by copies of recent testimonials within ten days of the insertion of this advertisement.

J. A. MAIR,
Director of Education.

Education Offices,
Rotherham.

BOROUGH OF GUILDFORD.

APPOINTMENT OF TWO GENERAL CLERKS AND ONE ASSISTANT BUILDING INSPECTOR.

BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the above appointments on the permanent staff in accordance with the National Scheme of Conditions of Service. The salary for each appointment will be in accordance with the General Division of the above scheme, which provides for a wage of £65 per annum at the age of 16 years, rising by annual increments to a maximum of £300 per annum at the age of 30 years in the case of males, and for females £52 per annum at the age of 16 years, rising by annual increments to a maximum of £240 at the age of 30 years. War bonus is payable in addition.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Applicants must state whether they are related to any member of the Authority, or to a holder of any senior office under the Authority.

Canvassing of members of the Authority, either directly or indirectly, will disqualify the candidate.

Applications, stating age, qualifications and experience, accompanied by copies of two recent testimonials, must be received by the undersigned, endorsed "General Clerk" or "Assistant Building Inspector," not later than the 2nd JULY, 1947.

GERALD H. R. WILSON,
Town Clerk.

Municipal Offices,
High-street,
Guildford.
17th June, 1947.

BOROUGH OF WANSTEAD AND WOODFORD.

TOWN PLANNING ASSISTANT.

Applications are invited for the appointment of TOWN PLANNING ASSISTANT in the Department of the Borough Engineer and Surveyor in accordance with Grade IV A.P. and T. Division of the National Scales (£420 × £15 to £465 per annum), plus London Weighting (£20 per annum), plus bonus (at present £59 16s. per annum).

Candidates must have had previous experience in the preparation and administration of planning schemes, and a sound knowledge of the relevant Acts and Orders. Preference will be given to the applicant who is a Corporate Member of the Town Planning Institute or holds an equivalent professional qualification, and who also possesses qualifications in Architecture.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the Council's conditions of service. The successful candidate will be required to pass a medical examination.

Preference will be given to applicants who have served in H.M. Forces.

Applications, to be delivered to the Borough Engineer and Surveyor, together with three recent testimonials, not later than 11th JULY, 1947.

The Council cannot undertake to find housing accommodation for the appointed person.

R. TREND BINKS,
Town Clerk.

Municipal Offices,
High-road, E.18.
June, 1947.

URBAN DISTRICT COUNCIL OF FRINTON AND WALTON.

SURVEYOR'S DEPARTMENT.

TECHNICAL ASSISTANT (TEMPORARY).

Applications are invited for the above Temporary Appointment from persons with an extensive experience of the building trade and capable of preparing and drafting schedules of condition and specifications. The appointment is mainly in connection with civil building licensing, and the requisition and repair of house property.

The salary is at the rate of six guineas per week inclusive, paid monthly. The appointment is for a period of nine months, and is subject to one week's notice in writing on either side.

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, and endorsed "Technical Assistant," are to be forwarded to Mr. H. D. Harrison, A.M.I.C.E., Engineer and Surveyor, The Council House, Frinton-on-Sea, not later than Monday, 7th July, 1947. Canvassing, directly or indirectly, will disqualify, and candidates must disclose in writing whether, to their knowledge, they are related to any Member or senior officer of the Council.

F. H. NEWNHAM,
Clerk of the Council.

The Council House,
Frinton-on-Sea.
18th June, 1947.

ROYAL BOROUGH OF NEW WINDSOR.

APPOINTMENT OF FIRST ENGINEERING ASSISTANT.

AMENDED ADVERTISEMENT.

Applications are invited for the permanent appointment of FIRST ENGINEERING ASSISTANT in the Borough Engineer's Department.

Candidates must hold the Testamur of the Institution of Municipal Engineers or equivalent. In addition, membership of the Town Planning Institute will be an advantage.

The salary will be in accordance with Grade V (A.P.T. Division) of the National Scale of Salaries—*i.e.*, £460, rising to £510 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Termination of the appointment will be subject to one month's notice on either side.

Applications, endorsed "First Engineering Assistant," stating age, qualifications, present and past employment, and giving the names of three persons to whom reference can be made, must be delivered to the undersigned not later than 9 a.m. on FRIDAY, the 11th JULY, 1947.

Applicants must disclose in writing whether they are related to any member or senior officer of the Council, and canvassing, either direct or indirect, will disqualify.

The Council are actively engaged in seeking housing accommodation for officers.

R. WEBSTER STORR,
Town Clerk.

1c, Park-street,
Windsor.

CORPORATION OF LONDON.

PUBLIC HEALTH DEPARTMENT.

TEMPORARY CLERK OF WORKS (SEWERS).

Applications are invited from qualified persons for the position of TEMPORARY CLERK OF WORKS in the City Engineer's Office to supervise the construction of Brick Sewers (mostly in Tunnel), at a salary of Seven Guineas per week, plus consolidation addition of £1 12s. 8d. per week.

Applicants must be fully qualified Sewer Bricklayers with experience in similar work, and the selected candidate will be required to commence his duties on Monday, the 1st September, 1947, pass a medical examination, and subscribe to the Corporation's Superannuation Scheme.

The appointment will be of a temporary character for a period of twelve months, with possible extension, and terminable by one month's notice on either side.

Applications, on forms to be obtained from the undersigned, stating age, qualifications and previous experience, and accompanied by copies of not more than three recent testimonials, must be delivered in sealed envelopes endorsed "Clerk of Works," to the Town Clerk, Public Health Department, Guildhall, E.C.2, not later than the 31st JULY, 1947.

PICKFORD.

Guildhall, E.C.2,
20th June, 1947.

(*Continued on page 85.*)

THE LINER CONCRETE MACHINERY CO., 138 PARK ROAD, GATESHEAD, 8.
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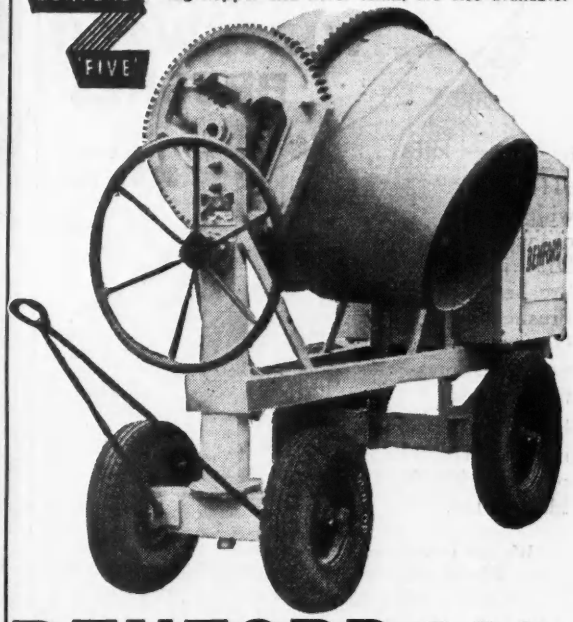

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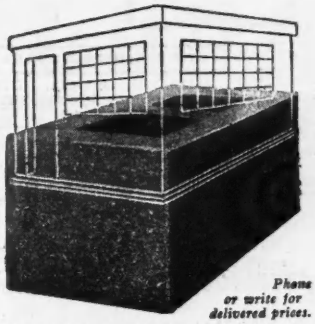

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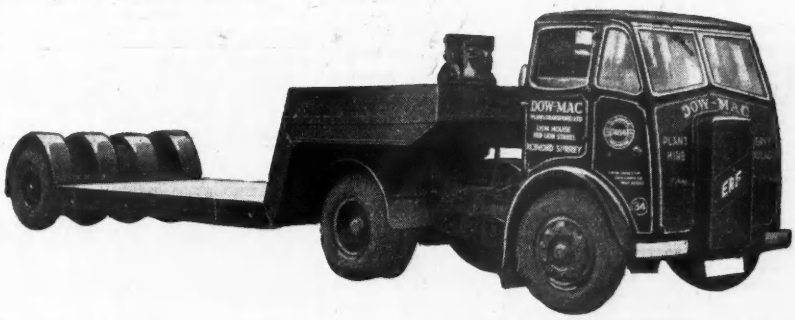

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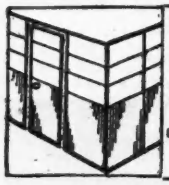

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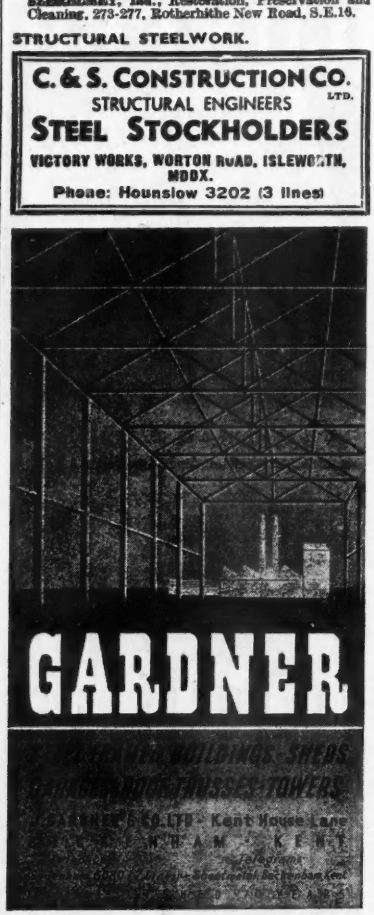

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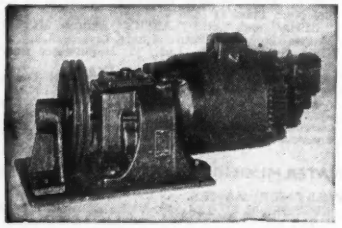

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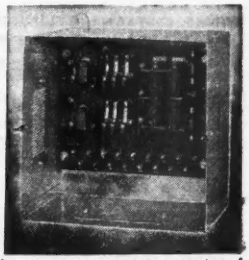

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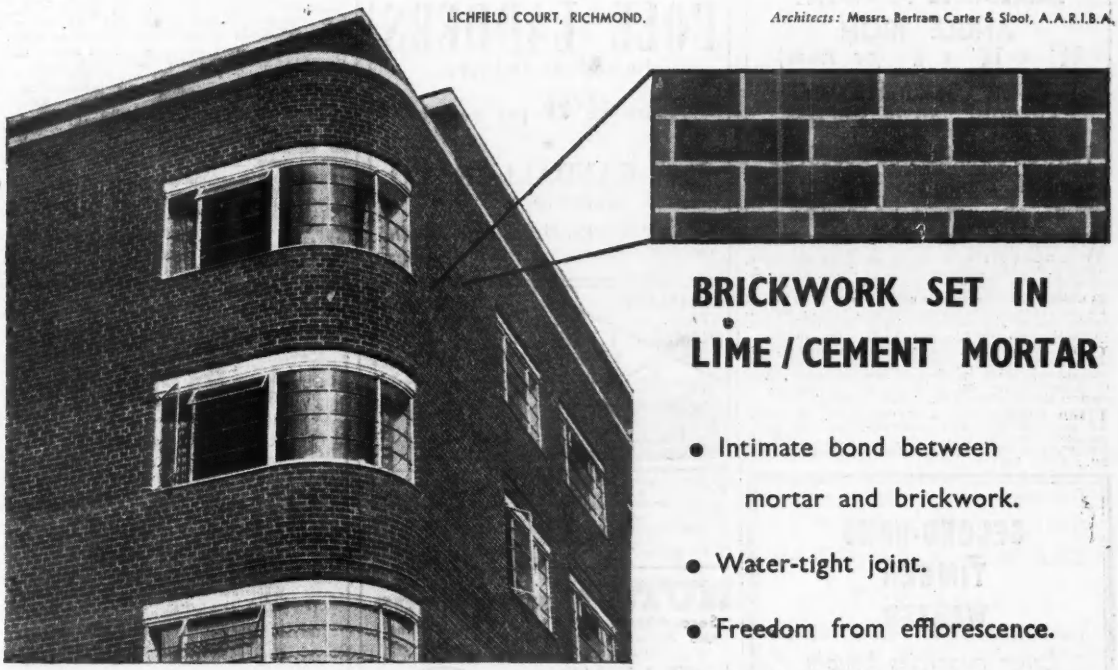

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LENNOX LADDERS, REGD., offer Builders early delivery of first quality extension ladders in parallel sections. Price List on application. —LENNOX LADDERS, Lennox-road, London, E.17. Larkswood 1425.

FOR SALE.—2-5/3½ WINGET Reconditioned CONCRETE MIXERS; New Hemel Hoists, 5 cwt. and 10 cwt., petrol or electrically driven; New ½-in. first-grade Air Hose; Four-tool reconditioned Air Compressor, Broomwade.—Further particulars, the WESTERN HIRE CO., Ltd., 17, Central Chambers, Ealing, W.5. 'Phone: Ealing 5512.

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HAND-POWER GRINDSTONES in iron trough stands for sale. Size of stone 30 in. diameter, 4 in. width. In new condition, but stones slightly chipped. Weight about 4 cwt., and are a first-class job. As space desperately required will accept 40s. each. Buyer to collect. Only few available. Offered subject to being unsold.—S. G. YOUNG, 154-6, Blackfriars-road, London, S.E.1. Waterloo 4369, 6277.

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Enquiries invited for Hire of 8-10-ton Bedford-Scammels. Ideal for Site Clearance and Plant Cartage. Additional Trailers for non-stop working. Weekly, Monthly or Yearly Hire.

KEITH & BOYLE LTD.
HARLEYFORD COURT, HARLEYFORD ROAD, S.E.11
Tel.: Reliance 2235

CHASESIDE MAJOR ½-YARD LOADING SHOVELS, Muirhill, 2 yard Dumpers, Concrete Mixers, for hire.—L. A. CARTY & CO., Ltd., Regina-road, Chelmsford. 'Phone 3359 or Hockley 47.

FOR HIRE.—5/3½ and 7/5 CONCRETE MIXERS; also PETROL SAW BENCH.— STONE & CO. (LONDON), Ltd., 325, Whitehorse-road, Croydon, Surrey (Tho. 4226-7).

FOR HIRE.—Seven-ton ANDERSON-GRICE ELECTRIC DERRICK, 120 ft. or 90 ft. jib; ALLEN-PARSONS SUPER 25 TRENCHER; both new and immediately available.—Write, Box T. P., c/o J. W. VICKERS & CO., Ltd., 7-8, Great Winchester-street, E.C.2.

MIXERS, HOISTS, PUMPS, No. 2 ACROW PROPS, 4 in., 5 in., 6 in., 8 in. ROAD FORMS for immediate hire. Mixers overhauled efficiently and promptly.—SLOGGETTS (ENGINEERING) CO., Ltd., 2, Burtons-road, Hampton Hill. Molesey 1627.

TARPAULINS, 21 ft. by 15 ft., loaned to approved Contractors in the London and Greater London area. Minimum hiring period, four weeks. Minimum number, three sheets. Charge 6d. per day. Ours are really top-notch sheets, so please do not confuse with heavy, patched-up ex-railway tarpaulins. We pay delivery outwards, you pay upon return.—S. LOMAS & CO., Ward-road Works, London, E.15. ('Phone: Maryland 3615.)

SITE Clearance, Tree Felling, Stumps Blasted, Site Levelling and reinstatement. Bulldozers for hire. —Box 273, "The Builder."

FLOOR SANDPAPERING MACHINES FOR HIRE. Latest type surfacing to edge, all voltages, easily operated. Abrasives, wax polish, supplied.—FLOOR RENOVATIONS, Ltd., 36, Lauriston-road, London, E.9. AMHerst 1080.

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PLANTS FOR HIRE.—We can supply Petrol and Electric Paint-spraying Compressors at £5 weekly.—AEROCEM, Ltd., 71, Lots-road, Chelsea, S.W.10 (Flaxman 1425-4).

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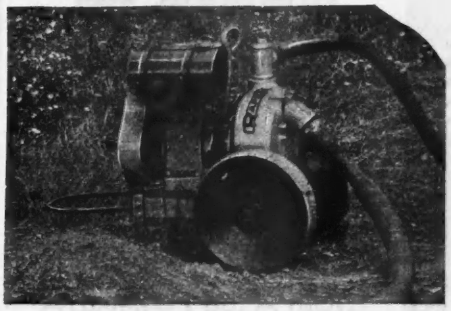

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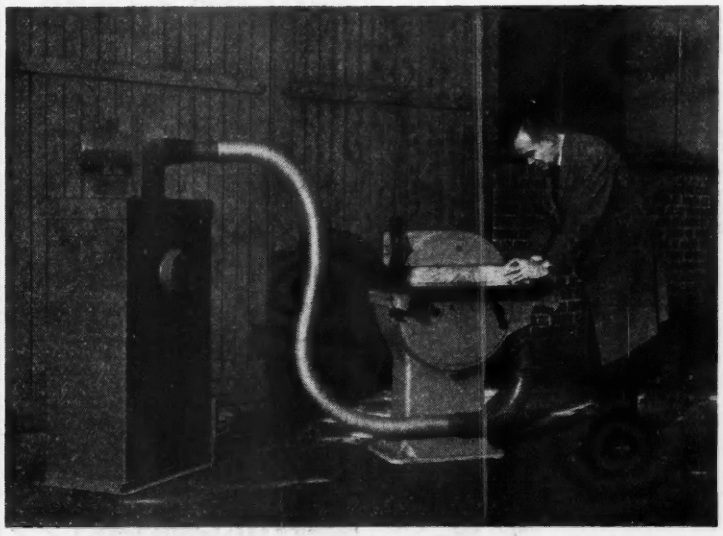

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The Lyctus Beetle, more generally known as the powder post beetle, attacks the sapwood of newly seasoned timber. This pest is a rich chestnut or reddish brown and about one-fifth inch in length. It has been proved time and time again that the Lyctus
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YOU need not wait for the decision of the new Ministry of Reconstruction. If you are rebuilding, use the famous SALOPIAN TUBULAR STALLS, fitted with metal parts specially designed for Hygiene—making cleaning easy, so essential for the production of T.T. Milk.
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PUBLIC APPOINTMENTS

(Continued from page 66.)

CUMBERLAND COUNTY COUNCIL.

APPOINTMENT OF SENIOR PLANNING ASSISTANTS.

Applications are invited for TWO SENIOR PLANNING ASSISTANTS within A.P.T. Grade VII of the National Scale, at salaries of £575—£650, plus cost-of-living bonus, at present £59 16s. per annum, and Car and Subsistence Allowances in accordance with the County Council's scale.

The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidates will be required to undergo a medical examination. The appointment is terminable by one month's notice in writing on either side.

Applicants should be Members or Associate Members of the Town Planning Institute, and a qualification in Architecture or Civil Engineering will be an advantage.

Applicants must be fully conversant with the Town and Country Planning Acts and Orders made thereunder, and be thoroughly competent to carry out field work, plotting and the preparation of plans.

Applications, stating age, qualifications, experience and previous appointments held, accompanied by three recent testimonials, and endorsed "Senior Planning Assistant," should be sent to the County Planning Officer, Citadel Chambers, Carlisle, not later than MONDAY, 14th JULY, 1947.

G. N. C. SWIFT,
Clerk of the County Council.

The Courts,
Carlisle.
18th June, 1947.

BOROUGH OF BRIDGWATER.

APPOINTMENT OF QUANTITY SURVEYOR (TEMPORARY).
APPOINTMENT OF ARCHITECTURAL ASSISTANT (TEMPORARY).

Applications are invited for the above appointments at salaries in accordance with A.P. and T. Grade VI of the National Scales of Salaries, namely, £535, rising to £600 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

The appointments are subject to the National Conditions of Service and the Local Government Superannuation Act, 1937.

Applications for the appointment of Quantity Surveyor (Temporary) should be Chartered Surveyors experienced in the preparation of bills of quantities, measurement of work, variations, settlement of final accounts for building works, chiefly Municipal Housing Schemes.

Applications for the appointment of Architectural Assistant (Temporary) should be Members of the Royal Institute of British Architects and have a good general experience, particularly in the preparation of site layouts, ⅛-in., ¼-in. and detail drawings, specifications and bills of quantities for Municipal Housing Schemes.

Appointments are terminable by one month's notice on either side, and successful candidates will be required to pass a medical examination.

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, to be delivered to the undersigned not later than 19th JULY, 1947.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates should state in their application whether they are related to any Member or Senior Officer of the Council.

H. A. CLIDERO,
Town Clerk.

Town Hall,
Bridgwater.
20th June, 1947.

BOROUGH OF LEYTON.

SCHOOL PAINTING.

APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited for a TEMPORARY CLERK OF WORKS in the Borough Engineer and Surveyor's Department from persons having practical experience in, and a thorough knowledge of, the trade, at a salary of £8 8s. per week, inclusive. The duration of the appointment will be approximately from two to three months, commencing in July.

Applications, in a sealed envelope endorsed "Clerk of Works—School Painting," stating age, experience, and accompanied by copies of not more than three recent testimonials, must be delivered to the Borough Engineer and Surveyor, Town Hall, Leyton, E.10, not later than FRIDAY, 11th JULY, 1947.

D. J. OSBORNE,
Town Clerk.

Town Hall,
Leyton, E.10.
June, 1947.

WEST SUSSEX COUNTY EDUCATION COMMITTEE.

JUNIOR TECHNICAL SCHOOL FOR BUILDING, BOGNOR REGIS.

Wanted, for September, 1947, a FULL-TIME ASSISTANT MASTER to teach CARPENTRY and JOINERY (Theory and Practical) up to City and Guilds Final standard, and to assist in the teaching of Building Science. Forms of application may be obtained from the Director of Education, County Hall, Chichester, on receipt of a stamped addressed foolscap envelope (2½d.).

T. C. HAYWARD,
Clerk of the County Council.

LONDON COUNTY COUNCIL.

VISITING TEACHERS are required from time to time in the following subjects: Building Construction; Building Science; Building Geometry; Mathematics; Land Surveying; Quantity Surveying; Valuations; Architectural Design; Draughtsmanship; Builders' Accountancy; Builders' Estimating; Structural Engineering Subjects (including Structural Theory Specifications, Steelwork Design and Details, Reinforced Concrete Design and Details). Persons who hold appropriate professional qualifications and have had responsible experience of practice and wish to be considered for approval should apply to the Principal, Brixton School of Building, Ferndale-road, S.W.4. (Stamped addressed foolscap envelope necessary.) (1997).

LANCASHIRE COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff:—

(a) ASSISTANT STRUCTURAL ENGINEER. Grade V. Salary £460—£510 per annum, plus cost-of-living bonus, at present £60 per annum. Candidates must be corporate members of the Institution of Structural Engineers.

(b) JUNIOR ASSISTANT HEATING ENGINEER Grade II. Salary £360—£405 per annum, plus cost-of-living bonus, at present £60 per annum. Candidates must have passed the Graduate Examination of the Institution of Heating and Ventilating Engineers.

The appointments will be subject to the provisions of Local Government Superannuation Act, 1937; to a satisfactory medical examination; and to the termination of each appointment by one month's notice in writing on either side.

Applications should be forwarded on the forms to be obtained from G. Noel Hill, F.R.I.B.A., M.T.P.I., County Architect, County Offices, Preston, to whom they should be returned, accompanied by copies of three recent testimonials, to arrive not later than SATURDAY, the 12th JULY, 1947.

R. H. ADCOCK,
Clerk of the County Council.

County Offices,
Preston.
June 27th, 1947.

URBAN DISTRICT OF FELTHAM.

HOUSING SCHEMES—ASSISTANT CLERK OF WORKS.

Applications are invited for the appointment of an ASSISTANT CLERK OF WORKS to supervise contracts for the erection of permanent houses under the direction of the Council's Engineer and Surveyor. The salary to be paid will be in accordance with qualifications and experience up to a maximum of £8 8s. per week, inclusive of cost-of-living bonus.

Candidates should have had previous experience as Clerk of Works on a large housing contract and must possess a sound knowledge of building construction generally.

The appointment will be determinable by one month's notice on either side. It is anticipated that the duration of the appointment will be eighteen months in the first instance, but may be extended to cover other schemes.

Forms of application may be obtained from the undersigned, to whom they should be returned, accompanied by copies of not more than two recent testimonials, not later than 18th JULY, 1947.

Canvassing will disqualify, and applicants must disclose in writing whether to their knowledge they are related to any member of, or the holder of, any senior office under the Council.

J. S. SYRETT,
Clerk of the Council.

Council Offices,
Feltham, Middlesex.
23rd June, 1947.

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(Civil Engineers) Ltd.

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Park 9261/2

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A. E. FIELD (Builders), Ltd., Require Building works of any description to the amount of £10,000.—All communications to 423, High-road, Ilford. Tel.: Ilford 1711.

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RODney 5151

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PLASTERING CONTRACTOR requires small CONTRACTS. Registered. Established over 30 years. Practical supervision.—W. CHARLES, 37, Suffolk-road, Barking, Essex. Tel.: Rippleway 2311.

PLUMBING SUB-CONTRACTS wanted. Labour and Material or Labour only.—ROLLS PLUMBING CO., Ltd., 42, Birkbeck-road, N.17. 'Phone: Tot. 3607.

McDONALD & MOWATT, French Polishing Contractors, 184, Winchester-road, and 50 South-Eastern-avenue, Edmonton N.9. Office, Builders' Work and Furniture estimated for.

WANTED.—BRICKWORK, Labour only, town or country, by rod or job.—W. MURPHY, 46, Napier-road, S. Croydon, Surrey.

CARPENTRY SUB-CONTRACTS or Daywork required, labour only. Weekly settlements, Houses, Flats, Rebuilds. Immediate personal attention.—CHAPMAN & PENNY, 20, Anmersh-grove, Stanmore, or 320, Park-avenue, Southall. Edg. 4784.

WANTED.—ROUGH CARPENTRY WORK of all descriptions. Must supply own timber or permit. Specialists in hut-making or repairing packing cases, frames, trusses, etc. Work done by the hour only, not contract.—Apply, L. BANKS & CO. (KILBURN), Ltd., 1-3, Springfield-lane, N.W.6.

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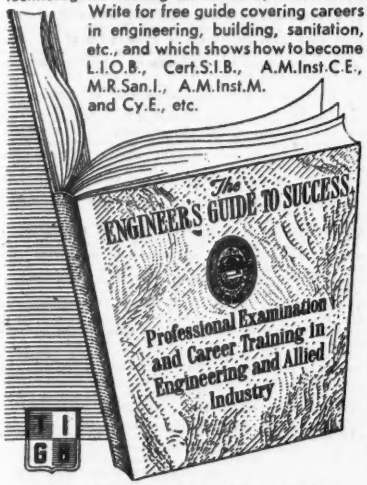

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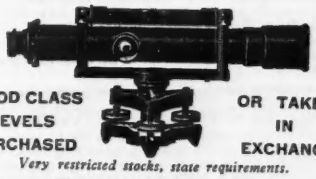

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WORKER-UP required in West End London Quantity Surveyors' office.—Write, stating age, experience, and salary required, to Box 410, "The Builder."

SENIOR TECHNICAL ASSISTANT required in the Order Department of a London Building Contractor's Office. Drawing Office experience essential, and a fair knowledge of Quantities an advantage. Permanency with advancement offered to a keen and capable man.—Apply, stating age, experience and salary required, to Box 348, "The Builder."

APPLICATIONS are invited by the Co-operative Wholesale Society, Ltd., for appointment of STRUCTURAL ENGINEERING ASSISTANTS in their Manchester Architect's Department. Applicants should have experience in the design and detailing of structural steel, reinforced concrete and foundation works. Salary up to £500 per annum, according to qualifications, plus cost-of-living bonus of £74 per annum. Good prospects of promotion for competent assistants. Successful candidates will be required to pass a medical examination for entry into compulsory Superannuation Scheme.—Applications, stating age, qualifications and experience, to C.W.S., LTD., Architect's Department, 1, Balloon-street, Manchester, 4.

CONSULTING ENGINEER, Westminster, has vacancies for Four REINFORCED CONCRETE DETAILERS, salary £300 to £450 p.a., according to experience. Designing experience not essential, but applicants must have had at least 12 months' experience of independent detailing under the guidance of a Senior Engineer. The above positions are on the permanent staff of the firm.—Applications to Box 278, "The Builder."

PRODUCTION ENGINEER, to develop and organise the production of precast concrete units in three factories. Essential requirements: intelligence, drive, experience of factory mass production (not necessarily in precast concrete), mechanical plant, and ability to grow with the organisation. Good salary and excellent prospects for the right man.—Box 319, "The Builder."

PLANT ENGINEER required for service in the Middle East, to join large staff already established. Must have administrative ability and technical knowledge of plant used on heavy construction jobs—excavators, scrapers, etc 2½ years' contract. Good salary and allowances. Age preferably not over 40.—Write, giving details of age, experience, qualifications, etc., to Box 268, "The Builder."

ENGINEER for Firm specialising in Builders' Steel Equipment, with knowledge of shuttering, scaffolding and reinforced concrete construction. State fully qualifications, experience, age, and salary required.—Box 428, "The Builder."

ESTIMATOR-SUPERVISOR Required by old-established Builders, Central London, with wide experience of maintenance and small structural contracts averaging £50/£1,000 up to £10,000. The position is intended to fill Directorship shortly.—Full details in confidence to Box 986, "The Builder."

ASSISTANT ESTIMATOR and SURVEYOR Required by Kent Builder. Applicants must have knowledge of present-day prices, able to take off quantities, measure up and assist supervise contracts, labour cost records, etc. Permanent position and prospects for keen, loyal and conscientious hard worker.—Write, stating age, experience, and salary required, to Box 349, "The Builder."

ASSISTANT ESTIMATOR AND SURVEYOR. About 30. Good knowledge of plan and spec.; take-off and site visit and bill up details reading for pricing in conjunction with Senior Estimator. Good prospects. Commencing salary £8. Applicants with necessary experience for this vacancy send details to Box 350, "The Builder."

ASSISTANT ESTIMATOR required by South-West London Builders. Capable of taking off, measuring on sites, and working up accounts. Reply, stating age, experience, and salary required.—Box 279, "The Builder."

ASSISTANT ESTIMATOR required by large Firm of Building and Civil Engineering Contractors in West London. Excellent opportunity for ambitious man.—Apply, stating age, experience, and salary required, to Box 320, "The Builder."

ESTIMATOR with capacity for administrative control of large number of Sub-Contracts, preferably with experience of structural steelwork, required as CHIEF ASSISTANT to Manager of large Sub-Contractors.—Box 361, "The Builder."

FIRST-CLASS ESTIMATOR and SURVEYOR required by old-established General Builders in Brighton. Should be able to assist in management. Good salary and prospects. Living accommodation available.—Box 363, "The Builder."

MESSRS. HOLLAND & HANNEN AND CUBITTS, Ltd., require in their Small Works Department the following:—

ESTIMATOR AND SURVEYOR, with good experience in alterations, conversions, reconstructions and war damage repairs, etc.

JUNIOR ESTIMATOR AND SURVEYOR, with some knowledge of quantities and site measurements.

TWO ACCOUNTS CLERKS, for preparation of day-work, prime cost and jobbing accounts.

ONE CLERK, for weekly allocation of wages and materials to various jobs.

ONE SHORTHAND TYPIST, preferably with knowledge of work in builder's office.

Replies, giving full details of age, past experience, salary, and when free, to be addressed, in first instance, to 1, Queen Anne's Gate, S.W.1, marked "Small Works Department."

EXPERIENCED ESTIMATOR required for General Joinery Works, East London.—Reply, with particulars of age, experience, and salary required, to Box 258, "The Builder."

ESTIMATOR and SURVEYOR required for Contractor's office S.W. London. Fully qualified in estimating, measuring, valuations and preparing final accounts. Good prospects for keen man. Apply, stating full particulars.—Box 239, "The Builder."

LEADING WEST-END FIRM has a vacancy for JUNIOR ESTIMATOR to work from their South London Dept. The appointment has scope for permanency and advancement for a keen and energetic man. Write in first instance, giving full details of experience, salary, etc.—Box 257, "The Builder."

ESTIMATOR Required to estimate and supervise several contracts, mainly in London. Must have first-class knowledge of estimating and able to take full responsibility for carrying out contracts from start to finish, including variations and final accounts. State experience, age, salary required, etc. Permanent position for a suitable man.—Box 403, "The Builder."

A LIMITED Company of Building Contractors require an additional DIRECTOR. Applicants should be not more than 40 years of age and have a thorough knowledge of the trade and ability to control staff. Substantial capital necessary.—Box 280, "The Builder."

MANAGER-CLERK wanted, experienced in Builder's repair and decorative work, estimating, typing, accounts, etc. State experience and salary required. WESTON, Builder, 442, Streatham High-road, S.W.16.—'Phone: Pollards 1404.

WORKS MANAGER for Architectural and general Metalwork. Practical experience essential. S. London.—Box 281, "The Builder."

ASSISTANT MANAGER and ENGINEER wanted by well-established Builders and Public Works Contractors. Must be thoroughly accustomed to all classes of estimating, measuring up, ordering and control of materials and labour; used to all instruments, etc., and be able to take complete control of large housing contracts. Please state full experience and salary required.—Box 351, "The Builder."

FULLY experienced BUILDING MANAGER required by Building and Civil Engineering Contractor for Nigeria, British West Africa. Must be able and prepared to take complete control of groups of contracts and possess ability to handle men. Previous experience in West Africa not essential but an advantage. Salary will be commensurate with the responsibility.—Write, giving comprehensive details of experience and qualifications, to Box 364, "The Builder."

CONTRACTS MANAGER, QUANTITY SURVEYOR and ESTIMATOR required by large firm opening permanent office in Manchester area. Permanency for suitable applicants. High salary for 100 per cent. efficient staff—no others need apply. Fullest particulars in confidence.—Box 380, "The Builder."

WEST OF ENGLAND Building and Civil Engineering Contractors Require the services of a MANAGER to supervise and co-ordinate activities of series of housing contracts situated over the South of England. Applicants must be capable of running this organisation as a self-contained unit and will be responsible for control of staff, labour, materials purchase, plant movement, and for the carrying out of all negotiations with the authorities concerned. Applications will only be considered in respect of men possessing previous experience in a similar organising capacity. The position holds the possibility of permanency.—Apply, stating age, salary required, availability, and details of previous experience, to Box 392, "The Builder."

PAINTING MANAGER Required by London Plastering and Painting Contractors. Applicant must have had the necessary experience to be able to price, supervise and take control of the work of a Painting Department carrying out large industrial contracts and internal and external painting of public buildings, hotels, cinemas, etc. Salary £600 per annum, plus commission by arrangement.—Apply, with full details of experience, to Box 401, "The Builder."

EXECUTIVE POST open to professional man with first-class knowledge of the War Damage Act. Must be good administrator, preference given to ex-Regional Manager, or other equal. The successful applicant will be required to work in the office of a well-known professional firm in London, and will (with considerable staff) have to deal with a very large number of claims. Remuneration will be at the maximum scale, and proper service contract will be entered into. Please give full particulars of previous positions held, including those with W.D.C. All references will be taken up, but in first instance applications will be dealt with by the Principal as "strictly confidential" pending interview.—Box 408, "The Builder."

BUYER'S ASSISTANT Required for N. London Builder's Office. Should have experience in taking off materials for ordering.—Write, stating age, previous experience, and salary required, to Box 352, "The Builder."

NOTICE OF CHANGE OF NAME

I beg to inform you that **"THE INCORPORATED CLERKS OF WORKS ASSOCIATION OF GREAT BRITAIN,"** by a Special Resolution of the Company and with the approval of the Board of Trade, and sanction of the Registrar of Companies, will in future be known as **"THE INSTITUTE OF CLERKS OF WORKS OF GREAT BRITAIN INCORPORATED."**

5, BROUGHTON ROAD,
THORNTON HEATH,
SURREY. *(June, 1947.)*

W. J. GIBBINS,
Secretary.

CONTACT REPRESENTATIVE required by well-established London firm of Building Contractors. This is a permanent position, and highest references as to integrity will be required.—Reply, stating age and commencing salary, to Box 353, "The Builder."

ASSISTANT BUYER required for large South London Building Contractor's Office.—Write in first instance giving details of experience and salary required to Box A.C. 20450, Samson Clarks, 57-61, Mortimer-street, W.1.

SALES REPRESENTATIVES.—Two required. To operate London and Home Counties. One North and one South of the Thames. Must have established connections with building contractors, local authorities, etc., and possess own cars. 10 per cent commission on Builders' equipment in large demand, with assured deliveries ex stock.—Box 282, "The Builder."

DECORATORS' SUPPLY REPRESENTATIVE required immediately, for the County of Yorkshire. Remuneration by salary, commission and expenses.—Apply, MESSRS. H. C. HILL, Ltd., Builders' Merchants, 27, Maxted-road, S.E.15.

TRAVELLER, already calling on Builders, Merchants, Architects and Local Authorities Required, to Sell Manufacturers' Tiled and Briquette Fireplaces. Prices are highly competitive and surrounds are first class.—Box 324, "The Builder."

LONDON Specialist Contractors Require SALES REPRESENTATIVE. Sound technical and practical knowledge decorative and protective painting treatments. Key position. Excellent prospects.—Particulars past experience, etc., in confidence to Box 390, "The Builder."

CAPABLE and experienced man required as ACCOUNTANT-OFFICE MANAGER for Contractor's office, West Outer London. Age 30–40. Building and Contracting experience essential, also practical knowledge of Departmental Accounts to Trial Balance or beyond.—Box 283, "The Builder."

WANTED.—BOY or GIRL, age about 15, for general office routine work and switchboard.—Apply, FRANK BATTY & SMITH, Ltd., Building Contractors, 18, Spring-street, Paddington, W.2.

SHORTHAND-TYPIST required; some clerical experience and knowledge of building terms an advantage. Write, stating age, experience and salary required.—Apply: E. C. HUGHES, LTD., Albion Works, Wokingham, Berks.

FINAL ACCOUNTS and COST CLERK.—Write, stating age, experience and salary required to JAMES T. COOK & SON, LTD., Holmes-road, Reading.

TIMEKEEPER-CLERK required. Experienced wages, P.A.Y.E., etc.—Write, giving age, salary required, when available, to Box 284 "The Builder."

CONTRACTORS (Westminster) require young man under 25 for GENERAL DUTIES in estimating and buying department. Opportunity to train as Surveyor later.—Write, age, salary, etc., Box 354, "The Builder."

BUILDER'S CLERICAL ASSISTANT.—Experienced P.A.Y.E. Ledgers and general office routine. —State salary required to Box 285, "The Builder."

COST ACCOUNTANT required for senior position in established Building and Civil Engineering office. Salary £700–£800.—Full particulars to Box 286, "The Builder."

EXPERIENCED WOMAN ASSISTANT ACCOUNTANT and SECRETARY required for Building and Civil Engineering Contractor's office. Knowledge of costing an advantage. Salary £350–£450.—Full information to Box 314, "The Builder."

INVOICE TYPIST required, with some experience and able to work on own initiative, for Victoria-street office of Constructional Engineers.—Box 959, "The Builder."

STOREKEEPER Required for old-established Builders' and Contractors' Main Depot, London district, S.W.2. Applicants must be fully experienced and able take sole charge of stores. Please reply, stating experience, age, and salary required.—Box 328, "The Builder."

ACCOUNTANT CLERK-SECRETARY, Female, Required for old-established Firm engaged in the following business: Builders, Ironmongers, Estate Agent, Café, Nursery. District 20 miles North London.—Apply, Box 381, "The Builder."

YOUTH from Technical College Required in London Chartered Quantity Surveyor's Office. Slight knowledge of typing preferred. Good prospects.—Box 325, "The Builder."

BUILDER'S CLERK, acquainted with war-damage claims and licences, etc. — Apply, 115, Lever-street, London, E.C.1.

COST CLERK required—glazing industry. Westminster district. Five-day week. Salary £286–£299.—Reply in detail to AYGEE, LTD., 100, Westminster Bridge-road, S.E.1. Wat. 6314.)

ASSISTANT ACCOUNTANTS. — Assistant Cost Accountants, Assistant Stores Accountants, required for service in Middle East, to join large staff already established. Salary £1,150 per annum, including allowances. 2½ years' contract. Age preferably not over 40.—Reply, giving details of age, experience, etc., to Box 265, "The Builder."

SITE CLERK and CASHIER required immediately for large housing contract near Gloucester.—Full details, age, experience, and salary required, to MANAGING DIRECTOR, MORSTON CONTRACTORS, Ltd., 124, Victoria-street, S.W.1. Interview London or Gloucester.

EXPERIENCED COST CLERK Required, used to shopfitting and builders' work.—Apply, FREDK. SAGE & CO., Ltd., Holborn Hall, Gray's Inn-road, London, W.C.1.

PERMANENT post for Quantity Surveyor's CLERK to assist in preparation of quantities, measuring up on sites and settling contractors' final accounts.—Apply in writing to GOTCH, SAUNDERS & SURRIDGE, Architects, Bank Chambers, Kettering.

SITE CLERK.—Applications are wanted for position of experienced SITE CLERK for large contract, Stepney.—Please apply in writing, giving details of experience, and salary required, to A. E. SYMES, Ltd., Brentwood.

SECRETARY/SHORTHAND-TYPIST Required by Staff Architect to large London Company. Applications should state age, experience, and previous appointments. Salary £320 p.a. — Box 393, "The Builder."

EXPERIENCED WAGES CLERK Required for large Office, North-West London. Fidelity bond required. Pensionable post.—Write, stating age, experience, and salary required, to Box 396, "The Builder."

TIMEKEEPERS Required, aged 25 to 45, for London, Home Counties and Midlands. Permanent employment for right man.—Write, stating age, experience, and salary required, to Box 397, "The Builder."

BUILDER'S CLERK required for Builder's office in West London; must have previous experience of general office routine, wages, P.A.Y.E., accounts, etc. Ability to assist in Jobbing Department would be an advantage.—State age, previous experience and salary required to Box 425, "The Builder."

REQUIRED.—SECRETARY for Builders' Manager. Shorthand, typewriting; accuracy essential. Knowledge of building trade an advantage.—Apply, CAMPS & JONES, Ltd. St. Joseph House, Uxbridge-road, Hayes, Middlesex. Telephone: Hayes 3691.

WANTED.—BUILDER'S ASSISTANT, used to buying, accounts and office side of Country Builders carrying out housing scheme, general contracts and jobbing, to work under manager. Should be able to control small jobs if required. State salary, full particulars and references.—Box 355, "The Builder." Builder."

ASSISTANT required with some technical knowledge of Precast Concrete Products, for general office duties.—Applications by letter, in confidence, stating age, experience and salary required, to: THE CROFT GRANITE, BRICK & CONCRETE CO., LTD., 7, Victoria-street, S.W.1.

NAVVIES and LABOURERS urgently required for Civil Engineering Contract, one year duration. —Apply, ROBERT HART & SONS, LTD., Site Offices, Civic Hall, adjoining Wembley Stadium.

COMPETENT BUILDER'S ASSISTANT Required to undertake estimating, costing, measuring, and general supervisory work. Country town 30 miles London.—Write, stating experience, age, salary, to Box 329, "The Builder."

EXPERIENCED BUILDER'S ASSISTANT required by Country Builders in East Surrey, at present employing 40-50 men on housing, farm buildings and jobbing. Estimating, costing, accounts, and general office routine. State salary and full particulars.—Box 360, "The Builder."

PLANT MECHANICS.—Working Charge Hands required for service in Middle East, to join large staff already established. 2½ years' contract. Must have sound knowledge of fitting and the machinery used on heavy construction jobs—excavators, scrapers, etc. Good salary and allowances. Age preferably not over 40.—Reply in writing, giving details of age, experience, etc., to Box 266, "The Builder."

BUILDER, S.W. district, principally Maintenance Work, requires, young capable and energetic ASSISTANT for MEASURING, for ESTIMATING and MAKING-UP JOBBING ACCOUNTS. Will be given opportunity to learn all branches of business, including supervision if found satisfactory. Write, stating experience, age and salary required.—Box 251, "The Builder."

REQUIRED AT ONCE: experienced Agents, General Foremen and Working Foremen, for Housing contracts ranging in value from £100,000 to £500,000, within a 25 mile radius of London. Applicants who are interested must apply in writing, giving details of previous experience, references and salary expected, and also when free to commence work, to Box 288, "The Builder."

AGENT with connection among Architects and Builders required to represent well-established Asphalt Flooring and Roofing Specialists, in Provincial and Coastal Towns. Remuneration by commission.—Box 362, "The Builder."

TO start at once!—Reputable Firm of Builders and Civil Engineers, established over 50 years, requires experienced keen AGENTS, GENERAL FOREMEN, ENGINEERS and WORKING FOREMEN, for housing and public works contracts in London, the Provinces, and British Commonwealth. Applicants to apply in writing, stating experience, qualifications, and when able to start. Good remuneration and prospects for the right men.—Box 845, c/o GEORGE MURRAY (ADVERTISING), Ltd., 184, Strand, W.C.2.

ENGINEER/AGENT required, to take full charge of a large road construction programme in Middle East, to join large staff already established. Should be A.M.I.C.E. 2½ years' contract. Good salary and allowances and prospects. Age preferably not over 40.—Reply in writing, giving experience, etc., to Box 264, "The Builder."

WANTED.—CIVIL ENGINEER AGENT for large Housing Contract, London area. Salary £1,000 p.a., plus bonus.—Apply, the UNIT CONSTRUCTION CO., Ltd., 38, Millbank, S.W.1.

WANTED.—Keen young man to train as AGENT or ESTIMATOR on building work, must be able to read dumpy, understand quantities, have some constructional knowledge. North London. Apply, giving particulars, experience, salary required, enclosing references.—Box 243, "The Builder."

INSPECTORS required for New Building Works in the London District. Salary up to £10 per week, according to experience, ability, etc.—Apply, ENGINEER, L.N.E.R., King's Cross Station, N.1.

WORKING FOREMAN required. High-class structural alterations. Permanent position. Old-established firm. London area. — Box 323, "The Builder."

FOREMAN POLISHER (Working) for small Woodworking Shop in N.W. London.—Write, with full details of experience, and wages required, Box 979, "The Builder."

FOREMAN WOODWORKING MACHINIST Required for Joinery Works in London area. Must be thoroughly experienced machinist and able to control labour. Permanent job and good salary for first-class man. Apply in confidence, giving fullest details of experience, and salary required. — Box 960, "The Builder."

BUILDING FOREMAN with organising ability required for Maintenance and W.D. repairs. Able to drive car and assist slightly in preparing accounts. References required. Write, stating age, experience, etc.—MERCER TAYLOR & CO., Amen Corner, Tooting, S.W.17. Bal. 2275-6.

WALKING GANGERS and SENIOR GANGERS Required immediately. TIMBERMEN and PIPELAYERS. Good pay. Long job.—Apply, UNIT CONSTRUCTION CO., L.C.C., Orbey Estate (Carpenders Park Station).

GENERAL FOREMAN required as outside supervisor. Jobbing to major contracts. To control 40–60 men and arrange their plant, material and proper instruction. Permanence and prospects for a virile, ambitious man with young company.—Box 289, "The Builder."

GENERAL FOREMAN required, willing to travel, experienced in reinforced concrete work and piling.—CHRISTIANI & NIELSEN, LTD., 54, Victoria-street, London, S.W.1.

FOREMAN WOODWORKING MACHINIST Wanted. Must be thoroughly experienced, able to control labour and read blueprints; building up small joinery works to 100 per cent. production. — Box 356, "The Builder."

A PROGRESSIVE CONCERN IN SURREY REQUIRES AN EXPERIENCED MAN TO SUPERVISE PRODUCTION OF LIGHT ANGLE-FRAMED SECTIONAL STRUCTURES. A THOROUGH KNOWLEDGE OF WELDING, RIVETING, BOLTING AND CUTTING OF IRON, STEEL AND ALUMINIUM ALLOY, TOGETHER WITH ADMINISTRATIVE ABILITY IS ESSENTIAL.

APPLY BOX NO. 367, "THE BUILDER," W.C.2.

CIVIL ENGINEERING GANGER required, experienced in handling plant and bulk excavation.—Box 318, "The Builder."

GENERAL FOREMAN required by Building Section of large London Factory. Permanent post for keen, energetic, experienced man used to factory alterations and maintenance embracing all building trades. Good organiser, able to work from drawings and quantities, and use own initiative. Fully conversant with present-day methods and able to control series of jobs employing staff of about 100, all trades.—Write, stating age, qualifications, experience on similar work, and salary required, to Box 438, c/o J. G. KING & SON, 150, Fleet-street, London, E.C.4.

GENERAL FOREMAN Required for permanent Housing Site in S. Wales. Reply, stating age, experience, and salary required. — Box 312, "The Builder."

PORTSEA ISLAND MUTUAL CO-OPERATIVE SOCIETY, LTD.—WORKS FOREMAN.—Applications are invited for the post of WORKS FOREMAN, to act under the direction and control of the Works Manager. Membership 69,000, annual trade £3 million. The department is responsible for the maintenance of the Society's properties, for building new properties and similar work for members. Present staff 150. Applicants must have had practical experience in the building trade and be able to survey and supervise jobs. Forms of application to which a letter may be attached by the applicant can be obtained from the Executive Officer, Co-operative, 110, Fratton-road, Portsmouth, not later than 10 July, envelope endorsed "Works Foreman" in top left corner.

CIVIL ENGINEERING FOREMAN required for service in the Middle East, to join large staff already established. Should have good experience in sewer work, handling heavy pipes up to diameter of 54 in. Pay £1,250 per annum, including allowances. 2½ years' contract.—Apply in writing, giving full details of experience, etc. Age preferably not over 40.—Apply, Box 262, "The Builder."

BUILDING GENERAL FOREMEN required for service in the Middle East, to join large staff already established. Pay £1,250 per annum, including allowances. 2½ years' contract. Age preferably not over 40.—Apply in writing, giving full details of experience, etc., to Box 263, "The Builder."

YOUNG TRADE FOREMAN, preferably C. and J., not over 30 years old, to act as CONTRACTS AGENT on two small Housing Contracts, South Coast. Applicants must be capable of controlling all trades and keeping all records. The position offers good prospects for advancement and a permanency for the right man. Previous experience in the total control of contracts not essential.—Box 369, "The Builder."

GENERAL FOREMAN required immediately for large housing contract near Gloucester. Only first-class men with previous experience of similar work and mechanised methods will be considered.—Full details, age, experience, salary required, to MANAGING DIRECTOR, MORSTON CONTRACTORS, Ltd., 124, Victoria-street, S.W.1. Interview London or Gloucester.

GENERAL FOREMAN for Civil Engineering Contract. Advanced preparation site work in Portsmouth area. Good manager of men. Permanency and good salary for first-class man.—Write, stating age, experience, etc., Box 407, "The Builder."

EXPERIENCED GENERAL FOREMAN Required for factory work in East London district. Write, stating age, experience, and wages required. — Box 391, "The Builder."

GENERAL FOREMAN Required for contract reinstatement after war damage, alterations and rebuilding, East London.—Apply, giving full particulars, Box 395, "The Builder."

EXPERIENCED GENERAL FOREMAN required immediately, used to Adaptations and Conversions and/or new Factory Construction.—ALMOND, 241a, High-street, Acton, W.3.

LEADING WEST-END FIRM requires WORKING FOREMEN PAINTERS and DECORATORS to operate in London and from their South London Dept. Telephone: Rav. 0308 for appointment.

STOREKEEPER/YARD FOREMAN Required by large Firm of Painting Contractors in London area. General knowledge of painting trade necessary, and ability to supervise men; also able to keep stores records. References essential. Salary approx. £400 p.a.—Write, giving age and experience, to Box 398, "The Builder."

GENERAL FOREMAN (experienced) Required for contract at Harpenden, Herts. Reply, stating age, trade, experience, firms been with, and salary required.—Box 404, "The Builder."

WANTED immediately, GENERAL FOREMAN, small Firm, N.W. London. Housing repairs, jobbing, knowledge materials purchasing essential. £10 weekly offered. State alternative considerations. — Apply, letter, to KIPP, 78, Adelaide-road, N.W.3.

BUILDER'S experienced GENERAL FOREMAN required for factory job near Witham, Essex.—Write, giving references, age, and salary required, to Box 764, c/o WHITE'S, Ltd., 72, Fleet-street, E.C.4.

GENERAL FOREMAN required to complete factory building in Doncaster.—Write, stating experience, age, and salary required, to Box 429, "The Builder."

SHOP FITTING SETTERS-OUT, MARKERS-OUT, FIXING FOREMEN, FIXERS and BENCH-HANDS required.—Apply Works Manager, COURTNEY POPE, LTD., Amhurst Park Works, Adj. 341, Seven Sisters-road, Tottenham, N.15.

A FIRM in Surrey requires a PRACTICAL MAN for TRAINING UNSKILLED MEN in the making of Timber Sectional Buildings, and to act as Inspector of Completed Work. He must have initiative, and from past experience be able to create and introduce a suitable system of teaching. Progressing and production experience useful.—Box 290, "The Builder."

TIMBER MARKER-OUT Required for Joinery Works, able to mark out Timber to the best advantage and to work to cutting lists.—Write, giving details of previous experience, etc., to Box 932, "The Builder."

SHOPFITTING SETTERS-OUT, JOINERS, FIXERS, FRENCH POLISHERS and PAINTERS required.—Apply, A. DAVIES & CO. (SHOPFITTERS), Ltd., Horn-lane, W.3.

SHOPFITTING SETTER-OUT required immediately; experienced all branches. West London firm offers position to adaptable man with excellent prospects.—Box 291, "The Builder"

SHOPFITTING CRAFTSMEN, all categories, urgently required for export orders. Staff canteen and welfare facilities. Usual travelling allowances.—Apply, COURTNEY POPE, Ltd., Amhurst Park Works, adj. 341, Seven Sisters-road, Tottenham, N.15.

VACANCIES occur in a young progressive Firm for the following: All-round SHOPFITTING JOINER, to take charge; BRICKLAYER; PAINTER; BUILDING LABOURER.—Please apply, write or 'phone: MESSRS. WOODCOCK, MARSHALL & CO., Ltd., 39, Great Windmill-street, London, W.1. GERrard 3109.

JOINERS and SPINDLE HANDS Required, adjacent East Acton Station. Modern factory, good conditions. Canteen facilities.—Apply, JAMES WALKER, Brunel-road, W.3. SHE. 2332.

EXPORT orders delayed by urgent need of SHOPFITTING MARKERS-OUT, SETTERS-OUT, BENCH HANDS, MACHINISTS. Staff Canteen, Welfare Facilities. Usual travelling allowances. —COURTNEY POPE, LTD., Amhurst Park Works, Adj. 341, Seven Sisters-road, Tottenham, N.15.

STRONG & CO., of ROMSEY, LIMITED, thank all applicants who answered their advertisement in the issue for the week ended the 6th June. Replies are too numerous to acknowledge individually. The appointment is now filled.

CONCRETE WORKMAN Required with knowledge of carpentry, bricklaying and general concrete work. Good pay and permanency for keen and energetic worker.—GERALD TOYNBEE (Contractors), Ltd., Barnham, Sussex. Eastergate 323.

CEMENT and CONCRETE PRODUCTS TECHNOLOGIST, to be responsible for development work on housing materials. Laboratory and Pilot Plant Scale. Salary £550 to £700, according to qualifications and experience.—STRUCTURAL & MECHANICAL DEVELOPMENT ENGINEERS, LTD., 2, Buckingham-avenue, Trading Estate, Slough, Bucks.

SERVICES OFFERED

Minimum 6s. (30 words). Each additional 6 words 1s. 3d. Box No. including Forwarding Replies 1s. 6d.

ARCHITECTS, Surveyors, Contractors and Building Trade Specialists requiring occasional drawing-office assistance should contact ALLERTON STUDIOS, 14, Maley-avenue, S.E.27. Gip. 3782.

ARCHITECTURAL and CIVIL ENGINEERING DRAWINGS and LAND SURVEYS can be undertaken by expanding organisation.—Moderate fees and prompt service; initial inquiries to Box 292, "The Builder."

EX-SERVICE STUDENT would appreciate opportunity of evening or week-end work. Architectural or civil drawing, W.D. surveying, and specifications.—Box 332, "The Builder."

QUANTITY SURVEYOR with large staff is prepared to assist Architects, Builders and Local Authorities in London and Home Counties and South Coast areas. Immediate attention given to all work.—Inquiries in the first instance to Box 293, "The Builder."

WORK WANTED by exceptionally successful ESTIMATOR/SURVEYOR of long experience. Taking-out quantities; variations; valuations, final accounts; W.D. surveys, etc. Thoroughly reliable. Reasonable.—Box 294, "The Builder."

QUANTITY SURVEYOR will give personal assistance in the preparation of Bills of Quantities, Estimates, War Damage Claims, Site-measuring, Final Accounts. Own office Moderate fees.—Box 295, "The Builder."

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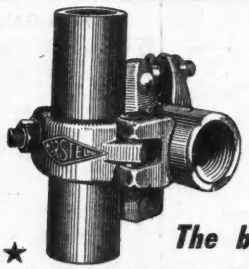

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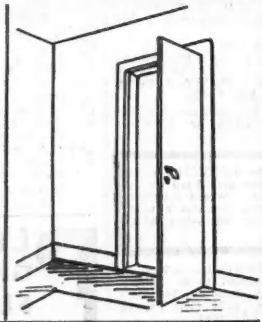

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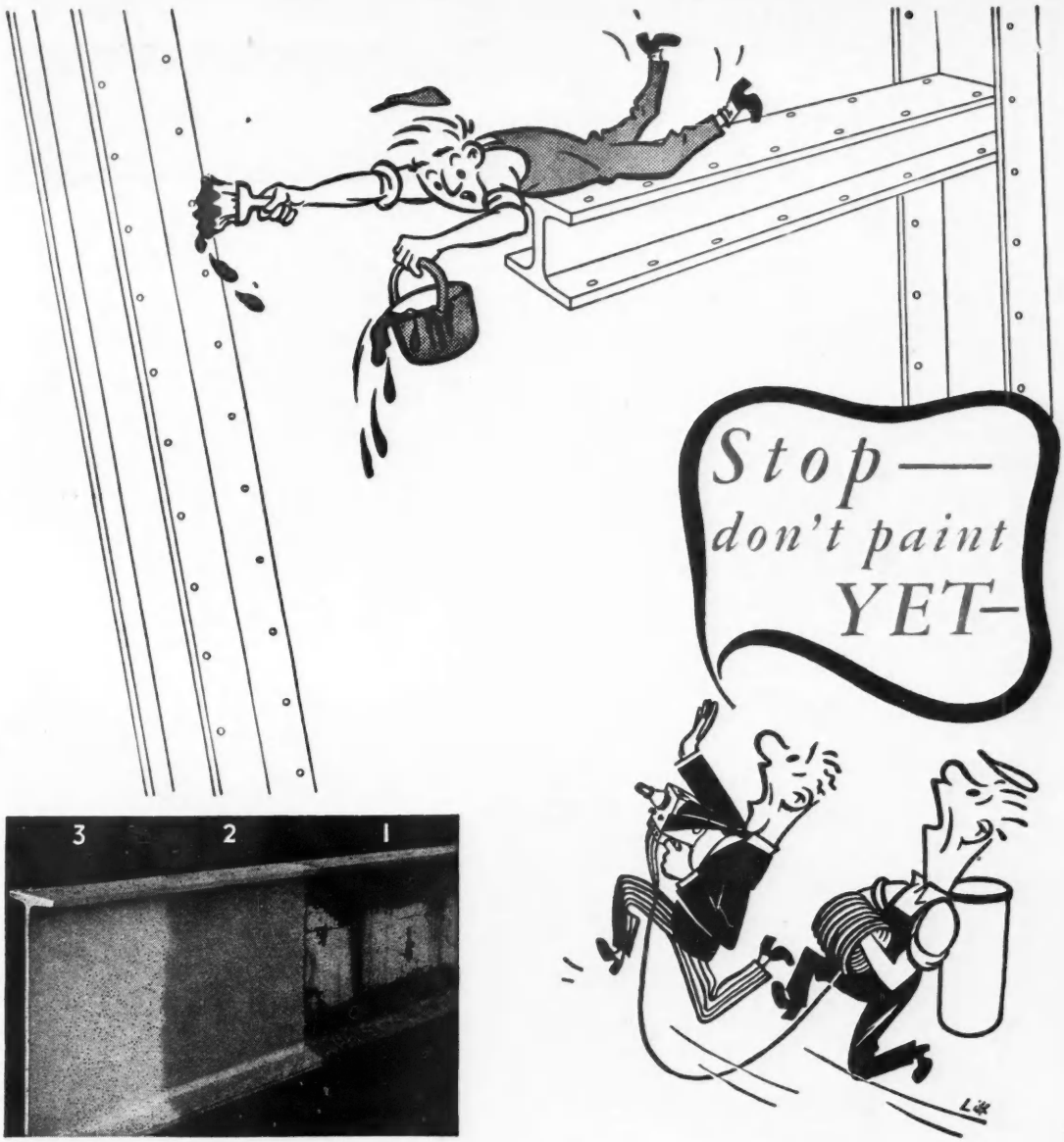

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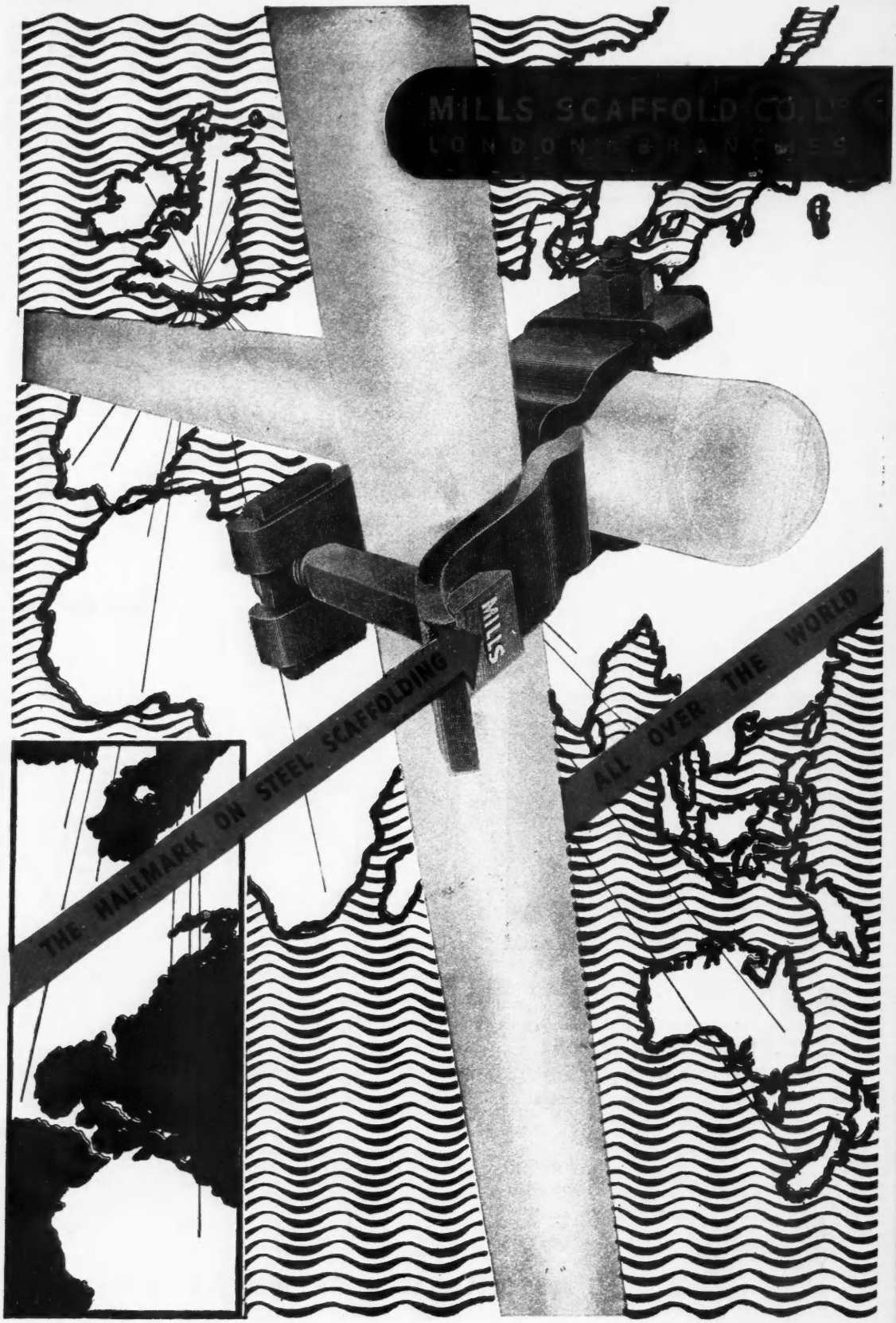

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